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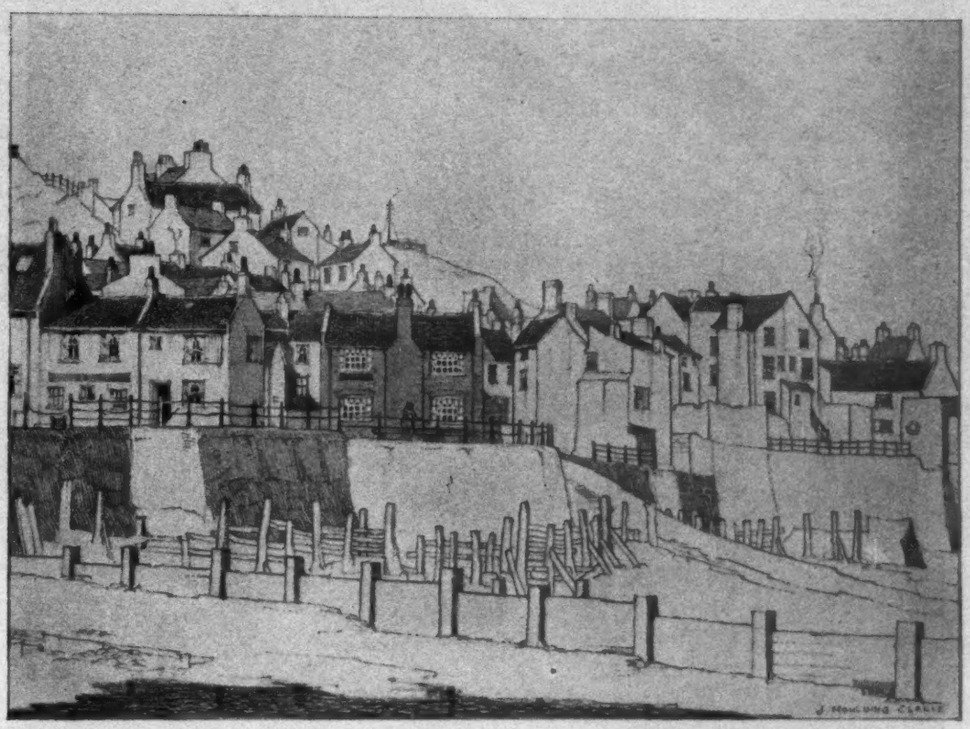


Staithes, Yorks.

From a pencil sketch by MR. J. MOULDING CLARKE, A.R.I.B.A.

MEETINGS

FRIDAY, *November* 27.

Institution of Structural Engineers (*Midland Counties Branch*). Mr. H. Jackson on "Modern Research on the Nature of Materials of Construction." At Birmingham. 6.30 p.m.

Oxford Building Trades Employers' Association and the Oxford Society of Architects. Mr. Sydney Tatchell on "The 1931 Form and Conditions of Contract." At the Cadena Café, Oxford. 7 p.m.

FRIDAY-SATURDAY, *November* 27 *and* 28.

Royal Sanitary Institute. Friday: Discussion on "Regional Smoke Abatement." At the Town Hall, Sheffield. 5.30 p.m. Saturday: Visit to the Sheffield Sewage Disposal Works. 10 a.m.

FRIDAY-MONDAY, *November* 27-30.

National Housing and Town Planning Council. Conference at Blackpool.

SATURDAY, *November* 28.

Scientific Society of the Royal Technical College. Mr. P. B. H. Brown on "Mechanical Refrigeration." At Glasgow. 7.30 p.m.

MONDAY, *November* 30.

Royal Institute of British Architects. Mr. Howard Robertson on "Street Architecture." Presentation of the London Architecture Medal, 1930, to Mr. A. J. Davis, F.R.I.B.A.; Unveiling of a portrait of Sir Banister Fletcher, P.-P.R.I.B.A. 8 p.m.

WEDNESDAY, *December* 2.

Royal Society of Arts. Mr. D. Alan Stevenson on "The Development of Lighthouses." 8 p.m.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "French Renaissance (1450-1900)." 6 p.m.

Institution of Heating and Ventilating Engineers. Mr. A. H. Barker on "The Principles of Calculation of Low-temperature Radiant Heating." 6.45 p.m.

THURSDAY, *December* 3.

London Master Builders' Association. Annual Dinner. At the Connaught Rooms, W.C.2. 7 p.m.

Society of Antiquaries. Mr. P. Morley Horder on "The Court House, East Meon." 8.30 p.m.

Institution of Structural Engineers. Mr. R. P. Mears on "Submersible Bridges." 6.30 p.m.

Institution of Structural Engineers (*South Wales Branch*). Major R. A. B. Smith on "Concrete Architecture."

Institution of Structural Engineers (*Yorkshire Branch*). Mr. J. Kershaw on "Influence of Structural Steelwork on Building Construction." At Leeds. 7 p.m.

Auctioneers' and Estate Agents' Institute. Mr. F. T. Hart on "Present-day Rating and Valuation." 8 p.m.

SATURDAY, *December* 5.

Architectural Association. Dr. Raymond Unwin on "Planning the Town." 3 p.m.

Association of Architects, Surveyors and Technical Assistants. Visit to Carpenters' Hall, Throgmorton-avenue, E.C.2. 2.30 p.m.

London Association of Builders' Foremen and Clerks of Works. Annual Dinner. At the First Avenue Hotel, W.C.1. 6.30 p.m.

MONDAY, *December* 7.

Institution of Electrical Engineers. Discussion on "Improving the Reliability of Domestic Electrical Equipment." 7 p.m.

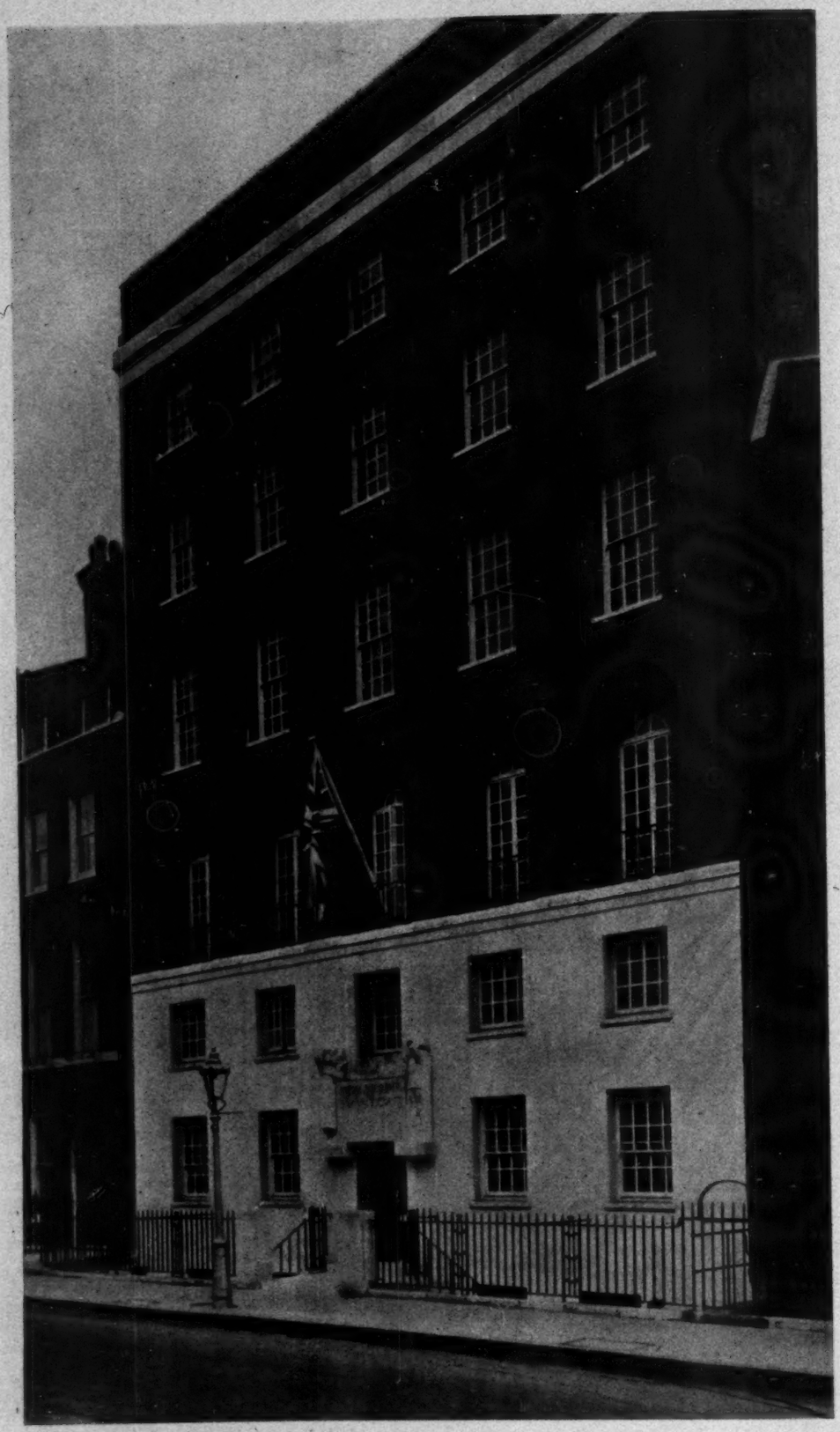
MONDAY-THURSDAY, *December* 7-10.

London Housing Societies. Housing Exhibition. At the Central Hall, Westminster.

TUESDAY, *December* 8.

South London Art Gallery Lecture. Mr. Percy Lovell on "The Bridges of London." At Peckham-road, S.E. 7.45 p.m.

Institution of Electrical Engineers (*Scottish Centre*). Mr. R. Grierson on "The Electrical Heating of Buildings." At Glasgow. 7.30 p.m.



The Royal Academy of Dramatic Art, Gower Street, W.C.

MESSRS. SWAN, NORMAN & CLAY, FF.R.I.B.A., and MR. A. WILBY, A.R.I.B.A., Architects.

TOMBSTONES

IT may be recalled that in 1926 the late Professor Lethaby contributed a series of articles to *The Builder* on the subject of "British Tombs: Ancient and Modern." At the present time the evidence of correspondence in the daily Press shows that at last the matter of modern tombstones, particularly those in country churchyards, is receiving attention from members of the public as well as from the clergy and those concerned to advise upon æsthetic and practical affairs connected with churches and their surroundings. For some while the Central Council for the Care of Churches and the various Diocesan Advisory Boards have been devoting time and thought to the subject. But the position and scope of such bodies gives them little opportunity to do more than express opinions and set forth a few general principles of taste, save where their advice is definitely sought in specific cases. The delicacy and tact required when dealing with actual cases can be imagined, since a person proposing to erect a tombstone is usually in a state of mind that does not readily welcome criticism, and in an emotional condition when sensitiveness of personal preference is more potent than sensitiveness of taste. Moreover, taste is itself so indefinite a quality that, even in normal circumstances, it is often regarded as presumptuous for one person to dictate to another in regard to it. Considerations of expense as well as of sentiment may enter into the matter, since it is not yet popularly realised that beauty and seemliness do not necessarily depend upon lavish expenditure.

The fact that the question has been so fully discussed in *The Times* augurs well for gradual improvement in popular opinion, and thereby in popular custom, and thereafter in commercial response to popular demand. For it must not be forgotten that the very large majority of persons who erect tombstones nowadays, whether in country churchyards or in great city cemeteries, are of the mass of the people, not members of a small circle with inherited and cultivated habits of taste. Nor are monuments erected exclusively by those who have the means to pay fees to an artist in design, or to a sculptor or architect of recognised repute. The great majority of memorials come from the workshops and yards of local monumental masons. There, perhaps, simply the necessary lettering is the work of local men on the spot. The stone has been imported from Italy, ready for the hands of workmen not necessarily possessed of knowledge in this particular branch of their trade, or the local shop may receive cross or column, kerb or headstone ready made except for the inscription. A very great number of memorial monuments come from the factories of large firms, equally ready to supply north or south, east or west, great necropolis or ancient village churchyard, in ignorance of local surroundings or local scale. Those firms may employ in their studios designers of real skill and scholarship, and much that is turned out is distinctly beautiful and dignified, but from the very fact of the multiplicity of the reproductions of the original design and more especially because of the general, not particular and intimate, appeal of the shop-made article there is often a lack of spirit and a certain cold mechanical repetitive character about it.

The small local monumental mason, working nowadays for the most part on alien material, and naturally influenced by what he sees of the work of the big firms, tends to take the line of least resistance. He has little opportunity for cultivating and exercising that skill of hand and sensitiveness of eye which his forebears used in dealing with local materials, or at least with materials whose "feel" they knew and with whose destined setting they were familiar and in sympathy. They had no copies but the work that was already in place, and their writing upon stone was almost invariably both legible and decorative.

The correspondence has brought into contact certain members of the public, some of the parochial clergy some members of advisory committees and some of those concerned with the production side of the tombstone industry. It is reassuring to be reminded that the National Association of Master Monumental Masons co-operated with the British Institute of Industrial Art in investigating as to suitable British stones for use in different localities, and the report issued in 1930 by the Central Council for the Care of Churches covered a great deal of the ground from the academic-æsthetic viewpoint. But this is an art and a trade in which matters of taste rest perhaps even more upon the production side than upon the demand of the public. In choosing a tombstone most people rely for counsel upon the maker, or judge by catalogue illustrations. Few are those who know exactly what they want, and fewer those willing and able to place the matter in the hands of an accredited architect or an artist craftsman. It would seem, therefore, that the present discussion should result in still further useful co-operation, and particularly in action by trade bodies and individual producers of graveyard monuments. Big specialist firms should find it worth while to aim more definitely at producing, and offering to the public, monumental work which, while still being of necessity on somewhat "mass-produced" lines, will at any rate conform to a high standard of quality in acknowledged essentials of design, scale and lettering, turned out by British labour in British materials, specified as suitable for various districts in the British Isles. It should not be impossible to achieve loyal conformity to some commonly agreed standard, and to accept commonsense dogma as to harmony of materials. Under such conditions a customer would be safe in accepting advice, and could be readily persuaded to choose the appropriate—not the inappropriate. At present it is not uncommon for individuals of known taste, when consulted on the matter of gravestones, to discourage, without further discussion, the employment of the services of quite well-known and reputable monumental firms owing to mistrust of the firm's judgment in environmental harmony. To the fastidious a "stock design" tends to become synonymous with "bad design," and a catalogued pattern suggests at once incongruity with a given setting. It ought to be possible in the future to demonstrate that this lack of confidence is without substantial foundation. The small local craftsman might well set himself to study closely the older memorial monuments in his own district, so that from a thorough knowledge of their materials, their forms, their lettering, he may evolve in his own manner for his present-day customers some worthy pieces of individual craftsmanship in the line of those of his predecessors.

Some such movements from the side of the producers would be more valuable and constructive than steps taken by parochial bodies and incumbents to exclude from the churchyards under their care monuments of particular material or character. The exclusion, for example, of Italian marble—a step in the right direction—is not in itself a sufficient measure of reform. The matter is one of custom, indeed of "fashion," which is a transient phase of custom, and the setting of fashion rests very largely with the makers.

NOTES

Constructive Expression.

It is rather amusing to read of "the magnificent proportions of the interior and the harmonious treatment of the exterior" which a writer in *The Times* finds in some of our cinema buildings. It is true enough that we are getting to be dependent in a general way on the development of steel structure for the general form of our buildings, but the real facts of the construction do not stand forth in any clear and definite way in either the exterior or interior elevations of many fine new buildings, and even if the facts of construction appear to dictate "magnificent" and "harmonious" effects to some amongst us, the clothing of the elevation is not expressive of the facts underneath. We are truly living in an age of steel, and though we make our plans and follow their development as far as may be in our elevations, we have to consider very carefully how we are going to find satisfactory units of steel construction on which to build them up.

Iron and Steel Construction.

The fact is that our architects to-day are faced with the problem of how to use materials and construction in such a way as to produce something of distinctive architectural value with proper economic use of modern materials. He would be a bold designer who would venture to suggest a perfectly truthful expression of construction in a great monumental building or a bank. The whole tradition of bank design would appear to claim a solidity and breadth of treatment which a bare and truthful statement of construction would make impossible. How can the facts of an up-to-date economic construction be made apparent in a building which is to suggest dignity and breadth? In commercial buildings, especially where a considerable height is a necessity, we may feel that the legs of steel with cross-ties which form the framework of construction in so many buildings may find expression in some sort of casing to the piers and panels of various materials between. If the emphasis of height and some kind of interest in detail be obtained a striking quality of some sort may be secured and buildings of this sort are now going up. But this means a casting aside of most of our traditional methods. And there is ample opportunity in such work for the architect to show his skill. This, however, still leaves the problem of how it is possible to erect buildings on which some of the great qualities of fine building may appear as in the days of fine stone construction, showing real dignity, breadth and repose. Have we arrived at a time when all the fine qualities which we so value in old building must give way to the insistent urge for iron and steel and concrete?

Research.

The research which is steadily proceeding as to the results of stress and strain on steel building appears to suggest that a good deal of needless weight of metal may very likely be used to-day. Of course, this means a possibility of great saving in costs. It is therefore of great importance that building restrictions should be considered in the light of scientific accuracy. As this scientific investigation is proceeding, and as it involves much time and thought we cannot yet fix definite limits to the possibilities of steel construction.

The Steel Structures Report.

The first report of the Steel Structures Research Committee, which has just been issued, is a document of considerable interest to architects, builders and structural engineers. The committee has collected and co-ordinated data bearing on the question from countries all over the world. It is a truism that our steel construction methods allow far too liberal a factor of safety, with a consequent waste of material and money that in these critical times is a serious additional burden upon industry, as well as a hindrance to the logical development of a widely used structural material. Hence, any modification of our present excessive standards is a matter of national importance. The committee, of which Sir Clement Hindley is chairman, has been working since 1929 under the Department of Industrial and Scientific Research in collaboration with the British Steelwork Association. In an interview with a newspaper correspondent Sir Clement put the matter very graphically when he said: "The fineness and precision which are brought to bear on the structure of an aeroplane designed to travel at 400 miles an hour represents one of the highest achievements of human science. How far behind this standard modern steel structure buildings have lagged is known only to the engineers and to the scientists and research workers who are now engaged in this important research." We propose to deal with the report in our next issue.

Engineering Influence.

For the architect the researches into results of stresses and strains are not, of course, unimportant, but as the facts point to a still further economy in steel structures he sees a still greater development in the engineering aspect of building, and less opportunity for expressing the beauty of building as we have been accustomed to think of it.

Quality of Architects.

The watering down of the qualifications of architects received a pertinent thrust by Mr. Manning Robertson in his interesting paper on "Architecture and the Public" to the Architectural Association of Ireland, on November 10. He said: "Before we make a claim for architects we must

Sculptured Panel on Hay's Wharf Building, S.E.

Mr. H. S. Goodhart-Rendel, F.R.I.B.A., Architect. Mr. Frank Dobson, Sculptor.

assure ourselves and the public that we are entitled to our demand, and that our qualification is based on a high standard." "But," he adds, "in order to get the Registration Bill through Parliament it was found necessary to water down the qualification till it was about 95 per cent. water." To "protect the public from the quack" made a fine cross-heading, but the trouble was the public adored quacks.

Tradition. Mr. Manning Robertson spoke well as to tradition and modernism. He said: "Are we not making a fetish of words? Sound tradition and reasonable modernism rest equally on a foundation more solid than 'style.' To pursue 'style,' whether ancient or modern, is to perpetuate the blue print." Amongst much admirable comment we must note that "constructional truth is a fine quality, but it is not necessarily architecture."

A Veteran Architect. The founding of *The Builder* dates back nearly 100 years, and its founder and the inventor of the Hansom cab was Mr. Joseph Aloysius Hansom, whose son, Mr. Joseph Stanislaus Hansom, died last week at the age of 86. He was a Fellow of the Institute from 1880 to 1896. He was an antiquarian, and founded the Catholic Record Society in 1904. Several of his buildings are well known—the Church of the Holy Name, Manchester, St. Philip, Arundel, St. Aloysius, Oxford, and others at Teignmouth, Bognor, Fulham, Torquay, Merthyr Tydfil, Portsmouth, etc.

Riverside Sculpture. The new building for Hay's Wharf, Ltd., designed by Messrs. H. S. Goodhart-Rendel and H. L. Curtis, is now nearing completion. It is situated on the river front, some hundred yards east of London Bridge. At the invitation of the architects an inspection was recently made of the sculptured panels, by Mr. Frank Dobson, of which we illustrate some examples. The three central piers of the river frontage are faced with the square panels, of which there are a large number, representing the impedimenta of dock-land, and surmounting these piers are placed four recumbent figures, the whole forming a central feature to the building. The sculptures themselves are of yellow faience, gilded and refired, a process which is believed to have a considerable measure of permanence.

Sculptured Panels on Hay's Wharf Building, S.E.

Mr. H. S. Goodhart-Rendel, F.R.I.B.A., Architect.
Mr. Frank Dobson, Sculptor.

The "British Standards Institution." During recent years the British Engineering Standards Association has prepared British standard specifications and established British standards not only for use in the engineering field, but also for a growing range of materials in the building, chemical and textile industries. The need for regularising this extension of the original functions of the Association has been under consideration from time to time, and became imperative when the chemical industry, as a result of a fully representative conference convened by the Association of British Chemical Manufacturers, invited the Association to widen its scope to include chemical standardisation generally. The building industry also desired a substantial extension of the work of standardisation within that industry, and urged that the title of the Association should be more in conformity with the wideness of its scope. At the Imperial Conference held in October, 1930, the desire was expressed that there should be a single centralise national standardising body in each of the countries forming the British Empire. It was therefore decided to re-organise the work of the Association into four main divisions of equal standing, responsible for the preparation of British Standard Specifications in the Engineering, Chemical, Building and Textile industries, each of the divisions being under the control of a representative divisional council. The Council, therefore, after securing the approval of the members of the Association, applied for, and have been granted, a Supplementary Royal Charter, authorising these changes.

The Work of the Institution. In future the name of the Association will be the "British Standards Institution," and its activities will be under the control of a general council, which will have under it the four divisional councils. The work of the Engineering Division, will, as before, be delegated to an industry committee, dealing with the main branches of the engineering industry, such as civil engineering, mechanical engineering, electrical engineering, etc., and will, of course, for a time, represent the larger portion of the Institution's activities. The great development in the standardising movement which has taken place since the first committee was set up by the Institution of Civil Engineers in 1901 as the Engineering Standards Committee, is a clear indication that industry as a whole has increasingly recognised the economic value of the work. There are now 600 committees and over 400 published British Standard Specifications. The term "British Standard" has been registered by the Institution as its standardisation mark. The Institution is not a profit-making concern and, apart from the grants received from the Government and the amount derived from the sale of its publications, it has to look to the associated industries for the funds necessary to carry on the work. Every British firm in these industries is eligible to become a member of the Institution at a nominal fee.

Dublin House Builders. We hear from Dublin that representatives of the newly-formed Dublin Federation of house builders attended the last meeting of the Architectural Association of Ireland, when the subject of "Architecture and the Public" was under discussion. The suggestion that some form of co-operation between house builder and architect should be inaugurated received gratifying support; in fact, we understand that preliminary steps to this end have already been taken. Nothing could be more beneficial to the art and practice of architecture, and we wish this enterprising body every success. Ireland has escaped much of the heedless building rush that has made the English suburb a thing of ridicule; if she can check further blemishes in time she can still do much towards preserving and assisting that beauty which is one of her great economic assets.

GENERAL NEWS

Professional Announcement.

From a list of 155 applicants, Mr. N. S. Bowes, borough engineer and surveyor of Newbury, has been appointed to a similar position under the Egham U.D.C.

Berkshire County Council Economies.

The Berkshire County Council, at its meeting on Saturday, had before it the report of the Finance Committee on economy proposals made in consequence of the national crisis. As a result of these proposals, which were unanimously accepted, a net saving will be made during the current financial year of £19,149. In a full year the total estimated reduction is £68,808 gross and £27,474 net. The principal savings are made on highways, and among the schemes to be postponed are the strengthening of Marlow Bridge and the acquisition of toll bridges over the Thames.

Davington Priory and its Church.

Davington Priory, near Faversham, Kent, has been purchased by the Central Board of Finance of the Church of England. The parish church of St. Mary Magdalene, an interesting Norman building attached to the Priory, at which services have been regularly held since the beginning of the thirteenth century for the parishioners of the village of Davington, is being thoroughly examined by Mr. William Forsyth. By the purchase of Davington Priory, ecclesiastical buildings of architectural interest have been secured. The Priory has a number of unique and well-preserved archæological features. Davington itself is a place of considerable antiquity. Situated on a hill just north-west of Faversham, Watling Street passes to the south of it a short distance away, and near by are traces of a Roman military encampment, where from time to time discoveries of Roman coins, pottery, etc., have been made.

The Church of St. Mary Magdalene, substantially constructed of flint with tiled roof, has many features of Norman architecture of the best period. The nave and the tower are early Norman. At the west end of the nave is a Norman arch. At the north end of the cloister is a Norman door which leads into the priory church. The general arrangement of the west end of the church is said to bear a striking resemblance to the same end of the Church of the Holy Trinity at Caen, founded by Matilda, the wife of William the Conqueror. At Caen, both the western towers are in being, but at Davington only that at the south-west angle remains. There is, however, undoubted evidence of the former existence of a similar tower at the north-west angle. It is estimated that a sum of about £2,000 will be required to restore the Church of St. Mary Magdalene, to strengthen the tower, and to carry out other necessary work in connection with the Priory. Contributions should be sent to the Rev. Canon F. Partridge, Secretary of the Central Board of Finance of the Church of England, Church House, Westminster, S.W.1.

Wellcome Research Institution.

Our illustration on this page shows the façade of the Wellcome Research Institution, the imposing structure which is being built at the corner of Euston-road and Gordon-street. The corner-stone was laid on Wednesday by the Rt. Hon. Lord Moynihan, K.C.M.G. During the proceedings, Dr. H. S. Wellcome, LL.D., the founder, made reference to the architect's excellent design. The new building occupies a site measuring 225 ft. by 135 ft., part of which was originally occupied by the Foundation's Bureau of Scientific Research and Museum of Medical Science. On the Euston-road frontage there is a colonnade of twelve fluted Ionic columns masking the second, third and fourth floors. A rusticated base extends to the height of the ground-floor story. The top story above the columns is recessed from the main building. There are eight floors in all. The elevation to Gordon-street consists of two end pylons with a row of six Ionic columns similar to those on the front. British Empire materials, with the slight exception of some Italian marble, are employed throughout. The structure is built around a 2,500-ton steel frame and the external facings are of Portland stone. Very little wood or other combustible material has been used in the structure. The main entrance doors, vestibule doors and those between the galleries on the upper floors are all of bronze, as are also the balustrade railings and gates, lift cars, garage doors, windows, electrical fittings, door furnishings, handrails and radiator grilles. The doors, generally, throughout the building are of sheet steel finished in bronze enamel. There are to be an up-to-date automatic lift installation and elaborate ventilation and heating systems. Special attention has been given to the construction of the lecture-hall, whose acoustic efficiency should be of a high order. The new building gathers under a single roof many important departments of research carried on separately under the auspices of the Wellcome Foundation. The architect of the new building is Mr. Septimus Warwick, F.R.I.B.A., and the builders are Messrs. Trollope & Colls, Ltd.

COMPETITION NEWS

West Yorks Society Pictorial Map.

The award in the competition organised by the West Yorkshire Society of Architects, 62, Woodhouse-lane, Leeds, has been made to Miss Helga Richards, 3, Southfield-avenue, Street-lane, Leeds. The prize was 10 guineas and the subject was "a pictorial map of the Society's area."

COMPETITIONS OPEN

	Particulars published in "Builder."	Sending in date.
Designs for new orphanage for Committee of Liverpool Orphanage, at Wavertree. Mr. A. H. Moberly, F.R.I.B.A., assessor. Premiums, £200, £100 and £50. Limited to local architects. Conditions from Secretary, Myrtle-street, Liverpool. Dep. £1 1s. ...	July 24	Dec. 8
For designs for new Town Hall and Municipal Buildings, for Walthamstow T.C. Mr. H. Austen Hall, F.R.I.B.A., assessor. Premiums, £500, £300, £200 and £100. Conditions from Mr. F. C. Garner, Clerk, E.17. Dep. £3 3s.	Sept. 18 Sept. 4	Dec. 31
Church, Low Shiregreen, Sheffield, to cost £7,500. Open to Sheffield and South Yorks architects. Mr. C. C. Thompson, F.R.I.B.A., assessor. Conditions from Hon. Sec., Sheffield, South Yorks and District Society, 15, James's-row, Sheffield	Oct. 23	Jan. 1,1932
Proposed new Municipal Offices for Norwich T.C. Mr. Robert Atkinson, F.R.I.B.A., assessor. Premiums of £500 for first design and £700 amongst next three. Conditions from Mr. Noel B. Rudd, Town Clerk, Guildhall. Dep. £1 1s.	Aug. 7	March 1
R.I.B.A. new premises. Assessors, Messrs. R. Atkinson, Charles Holden, H. V. Lanchester, P. S. Worthington, and Sir Giles Scott. Premiums, £500 and £750 among runners-up. All questions must reach the Secretary, 9, Conduit-street, W.1. by August 4	April 10	March 31
Design for all-British house to cost £1,000 exclusive of site and architect's fees. Premiums of 50, 20 and 10 guineas. Conditions from organisers Incorporated Association of Architects and Surveyors, Wilbraham-place, S.W.1	Nov. 20	Sept. 1
Open to all British sculptors. For War Memorial to Animals at Kilburn, for S.P.C.A. Mr. W. Reid Dick, R.A. assessor. Prize, £500. Conditions from Sec., R.B.S., 6, Queen-street, W.C.1	Sept. 4	—

The Wellcome Research Institution, Gordon Street and Euston Road, W.C.

MR. SEPTIMUS WARWICK, F.R.I.B.A., Architect.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

"Designing the Garden."

SIR,—Mr. Whitelegg showed judgment in selecting the most important point of my lecture, namely, that flowers are designed for the garden rather than the garden for the flowers. Perhaps the word "designed" should have been "arranged."

If it is agreed that the garden is an extension of the house, then all nature within the garden is conventionalised and used decoratively. The flowers in the herbaceous border at Hampton Court are arranged to look how we want them to look, and not how they might want to look themselves.

If a garden is arranged for flowers (and by that I mean for their spiritual quality rather than for the spiritual quality of ourselves), we get such places as the rock gardens, where flowers are most delightful in their natural setting. But this is nature and not a garden in our sense of the word.

About 150 years ago an architect named Kent "leapt the fence and saw that all nature was a garden." This was quite true, but it was the Garden of Eden from which we were excluded some time past. Unless you were nude you were quite inharmonious in a garden designed by Kent and his followers.

The English garden has flowers; but the gardens of Italy, France, Austria and Spain have all shown how fine can be the permanent materials of evergreens and stone alone. I hope Mr. Whitelegg will forgive me for trying to protect the instincts of flowers against the suggestion that any garden he or I might design is their spiritual home.

G. A. JELLICOE.

The Acoustics of Buildings.

SIR,—Your timely leading article in last week's issue concerning the complex character of audibility in various places of assembly suffices to meet the criticisms so freely expressed against architects by Mr. St. John Ervine in a recent review of this subject in *The Observer*. May I, however, add that, notwithstanding the considerable advances towards acoustic efficiency effected by experts' research and careful investigations in auditoria construction, a degree of uncertainty remains which experience proves to be so difficult to explain.

As a case in point, Mr. E. C. Robins, F.S.A., a well-known Nonconformist Chapel builder, in the 'seventies, erected a Congregational Church, which gave such complete satisfaction in this regard that he was commissioned to build another church, using the same plans, specification and materials. George Freeth-Roper (b. 1849, d. 1892) probably was responsible for the design. (See my paper, "Architects from George IV to George V," read before the Glasgow Institute of Architects, February 14, 1912, and given *in extenso* in the R.I.B.A. *Journal*). The replica proved to be acoustically far from satisfactory. The architect told me that in so far as he could tell an elevated railway on a viaduct happened to exist some distance away from the site of the second church, and that was the only difference to account for the failure.

Queen's Hall, in Regent-street, was erected from the plans of Thomas Knightly (b. 1823, d. 1905), acting in conjunction with C. J. Phipps, F.S.A. (b. 1835, d. 1897) as consulting architect. The latter designed His Majesty's, in the Haymarket, and many other theatres. Knightly told me that he attributed the acoustic success of the Queen's Hall to the fact that in detailing the cornices and other internal architectural details he had carefully employed convex or rounded forms throughout.

Subsequently, on the occasion of the Architectural Association excursion to Gloucestershire, I visited Tewkesbury, and one of the clergy attached to that splendidly capacious abbey church told me about the difficulty he had experienced in making himself audible at the west end of its vast nave. The trouble was solved by preaching to the first big circular column near the pulpit, and no more complaints happened on that score. Every auditorium probably possesses similar points of advantage. The Brompton Oratory Church, designed by Herbert Gribble (b. 1847, d. 1894), is a case in point. An episcopal visitor, about to preach there, on entering the church, inquired of one of the priests as to the best point to observe to ensure success. "Keep your eye on the clock," was the ready reply, as the procession passed to the stalls. (Brevity might have been equally well intended!)

In the Albert Hall I found that by leaning into the gangway at an angle of 45 deg. the speaker could easily be heard, but while sitting in a vertical posture audibility was impossible. No one knows better than Mr. St. John Ervine that often the actors and speakers are at fault. Ellen Terry, in her "Letters to Bernard Shaw," acknowledges that some trivial happening on the stage, "such as a matchbox out of place," would cause her to forget her words and fail to reach the audience.

MAURICE B. ADAMS.

Estimating.

SIR,—In reply to the last paragraph of Mr. Taylor's letter in last week's issue of *The Builder*, the only practicable remedy, so far as we can see, for the abuse in question lies in the registration of estate agents and the statutory recognition of their authorised scale of professional fees—a remedy which, in all probability, time and organised public opinion will provide. C. H. LEELAND AND CO.

Cavity Walls.

"No case of the penetration of moisture through a *properly designed and constructed* cavity wall has ever been brought to the notice of this Station. . . ." (Selected replies by the Building Research Station, *The Builder*, November 20, page 847.)

SIR,—There can be but few of your readers who have not been interested in the replies from the Building Research Station which you publish from time to time, and I think that all of us appreciate the great service that is being given by the Station to all in any way interested in building work. Had the above quotation concluded thus: "but from general observations by practical men we have reason to believe that many cavity walls are ill-designed and comparatively few are *perfectly* constructed," I, at all events, should find no fault with it. But instead the Station goes on to say: "and it is considered that, with the materials at present available, the cavity wall is *by far* the most satisfactory form of construction for domestic dwellings." (All the above italics are mine.)

It is not unreasonable to suppose that the architect who invoked this reply had some grounds for his apparent want of faith in the cavity wall as ordinarily designed and constructed, and I trust he will try out the method he himself proposes. It is one that will work in very bleak situations and has proved to be successful. It is, however, advisable to carry up the outer skin in such a way that projecting joints of lime mortar may be cut off on the inside face before the backing up is proceeded with, and that no more than two courses of backing be built before the cement filling is proceeded with. The bricks should not, of course, be too dry when used, but this is a rule that applies to all good workmanship.

The question of efflorescence is another matter, and I agree that it is more frequently met with in walls built with cement mortar than with lime. But it has occurred with cavity walls built with nothing but lime mortar, and not too much lime at that. I am under the impression that the Research Station is not yet at the end of its investigations as to efflorescence, but I may be mistaken as to that. J. R. TAYLOR.

"THE BUILDER" DEBATE

XLVI.—ASSESSORS' POWERS IN ARCHITECTURAL COMPETITIONS.

"That the promoters of an architectural competition should be permitted more voice in the selection of the winning design than is at present allowed under R.I.B.A. rules."

SIR,—If my memory serves me rightly, a debate on very similar lines to these was conducted in these columns a few years ago, but as the conclusions arrived at were less defined than I hope they will be in this case, I think there is a fresh field of discussion open, which may be profitably explored.

Readers of *The Builder* will be aware of the general conditions of R.I.B.A. regulations governing architectural competitions, and will remember that the promoter is allowed very little voice at all in the conduct of the competition. He has, presumably, the right to select his assessor, provided the choice is approved by the President, and no doubt he can bring to bear considerable influence upon the conditions of competition which the assessor would frame. But from that point, once he has become committed to the competition principle, he is entirely at the mercy of the assessor. The winning design will be selected by the latter, and once it is selected the promoter is bound to proceed with the job and appoint the winner his architect, or else abandon the scheme and pay scale fees upon its estimated cost. The prospect of such a leap in the dark may well discourage the intending promoter,

I do not suggest that the result of a competition should depend entirely upon lay opinion. Such a contention would aim at the destruction of the whole principle of architectural competitions. But I do suggest that the promoter should enter into the final counsels of the assessor before a definite selection is made. It should be the assessor's job to select a number of meritorious designs, choosing one for its merits in a certain direction (say, planning); another for, say, economy; another for architectural effect, and so forth. A good assessor should be able to present clearly to a lay promoter the reasons bearing strongly in favour of various good schemes and the disadvantages which may accompany otherwise good qualities.

He might reinforce these views with his own preference, as an additional guide to his employer. But the last word in deciding which shall be the governing factors of choice between one good scheme and another should rest with the man who is "paying the piper," and if this principle could be admitted into the R.I.B.A. code I am sure that the promotion of open competitions would receive a fresh impetus and the profession would suffer nothing detrimental to its interests.

POSITIVE.

The Slate Industry.

In the House of Commons this week, Mr. Llewellyn-Jones asked the Minister of Health whether he had considered the communication from a conference of local authorities in North Wales calling attention to the depression in the slate industry, and urging the desirability of making it a condition of all housing grants that all materials used in connection with housing schemes should, as far as practicable, be of United Kingdom origin; and, whether he could see his way to give effect to the policy suggested in the communication.

Sir E. Hilton Young said he had received the communication. A circular had been issued to local authorities urging them to make the fullest use possible of British goods, and a national campaign to this end had been inaugurated. Special legislation would be necessary to give effect to the proposal as to the imposition of a condition.

BUILDING NEW RUSSIA.

A VERY crowded meeting of the Architectural Association on Monday evening heard a lecture by Mr. Clough Williams-Ellis, F.R.I.B.A., on "Building New Russia." The President, Mr. A. B. Knapp-Fisher, was in the chair.

The preliminary business included seven nominations, 117 elections and a vote of condolence with the relatives of the late W. Talbot Brown and Alfred Bryer.

Mr. Williams-Ellis's lecture, while being devoted mainly to architectural and allied subjects, dealt also with the social aspect of Russia. He had found going to Russia a most exhilarating experience, and had seen the far-sighted, comprehensive, co-ordinated town and country planning of Russia. There was an extraordinary eagerness on the part of the Russians to show what they were doing, and when one saw it one did not wonder they were proud; the five years' plan had made an exasperating, inefficient, slovenly, unbusinesslike people into an irresistible team. They had a scheme, and were working to it. Brand new industrial towns were springing up on what a few years ago had been barren steppe. Old cities were being re-conditioned and replanned. Long ago the planners had settled the question as to what was the optimum population of any particular town, whether old or new, and if accommodation was needed for an increasing population that must be provided in a satellite town, its own green belt and its own facilities, cultural, educational, medical, and everything else. In such towns one saw being erected vast public buildings, such as great office blocks, housing schemes, schools, hospitals, crèches, kindergartens, stadiums, places for water sports, and everything else one could think of. One such city was being erected chiefly for the making of tractors. The site chosen was in the centre of the fertile Ukraine plain—chosen because it was where tractors were most needed, because it had convenient water transport and was well situated to get its raw materials from the Urals. Such a town was planned out in advance—first of all, what was to be immediately built, and then what should follow in due course if development was justified. In this town the lecturer said he had attended a very interesting meeting between the Commissar (the head of a communal bank financing all construction under the five-year plan), whom he was accompanying on this visit of inspection, and the local general manager. Asking what the discussion was about he was told that the local general manager had been pushing on with the foundry and machine shops at the expense of the crèches and kindergartens; and the Commissar had insisted that labour should be transferred back from the factories to the things that were necessary for the balanced growth of the town.

In the matter of industrialisation, the Russians were endeavouring to do, and he thought would do in the space of a decade, what we had done in this country during the peak century of the industrial revolution. But they were doing it with most, if not all, of our mistakes left out. Rightly or wrongly they considered that what we had built had become our prison and might become our tomb, whereas they were building a sort of New Jerusalem. The scope of their activity was fabulous, staggering; the marvel was not that the work was done badly, as much of it was, but that it was done at all. They were short of building materials, short of every kind of skill, even short of every kind of rough labour. To meet their difficulty they were diluting their labour with boys and girls just over school age; any boy who preferred driving a plane to driving a plough could call himself a joiner, and was accepted and used as a joiner, because he was the best they could get. Building labour was 12 per cent. female. There were not enough workpeople. He had seen a score of great buildings at a standstill for lack of labour. Others had stopped for lack of materials, although the output of these was prodigious. On the subject of women employed in building in Russia, the lecturer said that he saw one great block of flats where all the bricklayers and most of the plasterers were women. The women were doing the work no better than the men—they could hardly do it worse—but they were doing the best they knew, and, like everybody else, doing it with great enthusiasm. Being a woman was no bar to entering any trade or profession in Russia, and she was not prevented from following that trade or profession when she became wife and mother. Free maternity benefit, crèches, nursery schools and kindergartens made this possible.

Speaking of the quality of the work being done, the lecturer said that, looking at a Russian building one could never tell whether it was in process of erection or repair—very often it was both. There was nothing natty, chic, Welwyn-like about Soviet Russia. Some day there would be, and he wished the Russians could see Welwyn. In Russia there were not enough architects good, bad or indifferent. By accident he had come across a young architect named Konigsburg, who had studied in Italy before the revolution, and was now practising in Moscow. That city was so crowded that this young man's office had also to be his dining-room and his nursery. Mr. Williams-Ellis said that he had gone into this office, and the first thing he had seen on the young architect's desk was the plan of a new park of rest and culture for Moscow. "What else are you doing?" he had asked, and the young architect had replied: "I am doing the whole town and country planning of Bashkir"—a country twice the size of France. Konigsburg, with twenty assistants, was doing that job! Mr. Williams-Ellis had remarked: "You cannot be doing that properly," and the young architect had replied: "Of course I am not. Why don't you come and help us?" This invitation had been repeated several times officially and unofficially.

Of modernist architecture the lecturer said that the office of which he had just been speaking was in a block of flats that looked like a modern German liner. The block had a very good functionalist plan, but the trouble with functionalism in Russia was that such a lot of things did not function. The Russians had picked up all the fashionable tricks, and designed to get a modish, up-to-date exterior. Usually it hurt them terribly when this was pointed out. It appeared as though behind the Russian architectural Trilby there was a German Svengali who was not always understood, so that at times one got rather curious results. All Russian architects were grossly overworked, and one got evidence of this fact in their buildings. There was a sort of orphaned look about those buildings because the architects had not time to visit them during construction, much less after they were finished. Indeed, there was no such thing as finish as we understood it.

As to stories of forced labour, the lecturer said that, if he had anything to do with building in Russia, labour would be a good deal less free than now. In one case, asking why a building was at a standstill for labour, he was told that the town where it was being erected had not very good bathing, and the cinema was only third-rate, so all the workpeople had gone to places where life was more amusing. The railways were not adequate and were choked by moving building labour of all sorts. One reason why labour everywhere was inefficient was because it never stayed long enough. A young man would start as a joiner, but next time think it better fun to sign on as a plumber. When the attention of a foreman was called to some very bad joinery work, and a question asked as to the man who had done it, the reply had been, "We cannot afford to sack him; there are not enough; so I have put him off from being a joiner to being a navvy." The architects were partly to blame for the condition of affairs. In their offices in Leningrad and Moscow they worked day and night, turning out details in the fashionable modernist way, regardless of the fact that on the job they had this rough, if ready, labour and inferior materials. But these criticisms were on matters of detail. Architects knew that details mattered, and mattered profoundly, when it came to a question of upkeep; but the walls would stand, the roofs and floors would remain, and gradually, as conditions became easier, defects would be remedied.

The slides that followed were partly illustrative of old Russian building, but chiefly of the new. Of some of the old the lecturer said he had never seen such a collection of charming little baroque buildings. The break between the old and the new was complete because the Russian definitely and passionately intended that it should be complete. Some of the old churches were put to other uses. Mostly they were not fit for any purpose except the original one, but he had seen one used as a woodworking shop, another as a communal kitchen, and a third as a hospital. As to monasteries, one saw them rising great, rich, beautifully built, surrounded by a cluster of mud hovels; because before the revolution only the church and a few private palaces had architecture. Some of these monasteries were now put to other purposes; one shown was a reformatory for criminals. Some examples were shown of what remained of the old poverty and squalor, but the Russians, said the lecturer, were seriously tackling the problem of slum clearance.

Many examples were shown of modern functional architecture. The lecturer pointed out there was a great variety of functions that a building might fill, but from a look it was often impossible to say whether it was intended for a factory, a club, a cinema, or a crèche. Individual buildings in Russia did not stand close scrutiny. There was no such thing as refined and appropriate detail. All the applied arts were at an extraordinarily low ebb. There was no finish or trim about anything. The Russians were concentrating exclusively on big production, and it was because they were so concentrating that they were achieving things that neither we nor anyone else had yet attempted.

Professor Julian Huxley, who proposed a vote of thanks to the lecturer, said that pre-revolution Russia, as regards bureaucracy and general political outlook, was in the eighteenth century. As for industry, it was at the beginning of the industrial revolution, while the countryside was in the early Middle Ages. Then had come war, revolution, famine and pestilence. From that low level Russia had started in 1923, and she must be judged by the progress she had made since in spite of difficulties.

Mrs. Cecil Chesterton, who seconded the vote of thanks, said she would never forget the feeling of utter depression that seized her when, after a visit to Russia, she found herself in her own country again, faced with millions of unemployed, and remembered that in Russia there was a demand for labour which within its borders could not be met.

Mr. H. B. Ormerod said, as to architects in Russia being overworked, everybody in Russia in a technical capacity was overworked.

The vote of thanks was heartily accorded and, the lecturer having replied, the proceedings terminated.

PUBLIC RECREATION FACILITIES.

Mr. J. Murray Easton, F.R.I.B.A., in delivering the fourth of a series of public lectures organised by the Architectural Association, at 36, Bedford-square, W.C.1, last Saturday afternoon, said that recreation was the indispensable complement to industrialism, and to provide adequate facilities for recreation was one of the most urgent social problems of to-day.

Mass production, while it held out for us hopes of an era of plenty and of leisure, threatened also boredom and discontent. We could very easily have an inferiority complex in face of machines, for it was not difficult to feel that there was almost nothing a machine could not do better. Hence it was of prime importance for everyone to have the chance of some activity in which the doing of things counted for more than what was done. The inhabitants of Samuel Butler's country of "Erewhon" might have avoided the necessity of destroying their machines if they had learnt to play properly, and we might yet escape from our present discontents if we were wise enough to ensure that everyone had a chance of being an active entertainer of himself—not a passive entertainee. So his paper would deal largely, though not exclusively, with places in which the player was more considered than the audience.

Only a few years ago we in this country had an unshakeable belief that we were the only nation that really played games and took enough exercise. Now we all knew that our best players in nearly every game had been beaten by those of other countries, but he doubted whether most people realised the extraordinary advance that had been made on the Continent—in Germany, particularly—in providing widespread facilities for public recreation. This country had a very big start, and in many ways it still led. No city in the world, he supposed, had quite the extent and variety of open spaces in and around London, but in the industrial areas of the Midlands and the North things were very different. But it was, above all, in the convenience, order and seemliness of its playgrounds that Germany could teach us a lesson. Every German city that he had visited had prepared a plan of development that included the provision of open spaces, play centres, baths, etc., for children and adults. Ground was earmarked for the purpose, and, if not available at the moment, was acquired when the opportunity occurred. The culmination of these centres was the stadion, which consisted of a group of stadia, a ground for the various sports, and generally included an open-air swimming pool, tennis courts and a restaurant. These grounds were used for the more important matches and athletic events, and they provided a certain amount of accommodation for spectators, but not generally to the same extent as English football grounds. At Frankfurt, which possessed one of the most magnificent stadions in the country, there was no space for spectators around the swimming pool. All the extensive space round it was reserved for the users, who had ample room to play and get the benefit of the sun or light baths.

It might be thought that such places were not really the concern of architects. A field was the principal ingredient of them all, from the simplest to the most elaborate. Even then the architect, as town planner, was concerned from the first. That it should be in the right place, be part of a considered scheme that it should be so fenced planted, equipped with partitions for spectator accommodation, as to be an asset to the neighbourhood, not an eyesore—these were things that architects did concern themselves with. We wanted in this country to have more and better conceived schemes for places of public recreation and the very highest skill was not too good to apply to this object.

SKETCHES IN BRITTANY

By MARTIN S. BRIGGS, F.R.I.B.A.

The ancient duchy or province of Brittany has been connected with England all through its history, almost as intimately as was the duchy of Normandy itself. But it is difficult to affirm that its architecture shows many traces of definitely English influence, or, indeed, to explain briefly wherein its special character lies. Although Brittany does not contain anything like the number of famous churches and *châteaux* that one finds further east, most people have heard of the cathedrals of Quimper and Tréguier, to say nothing of its innumerable prehistoric remains, of which the "Alignments" of *menhirs* at Carnac are the most important.

The four sketches illustrated here were all made last September in the neighbourhood of Morlaix, a district not yet entirely swamped by English holiday-makers in the summer, as are the *plages* further east, round St. Malo and St. Brieuc.

Brittany is not only the province that supplies France with the bulk of her sailors, but also the last stronghold of the Catholic faith in that country. If you wish to escape into France of the Middle Ages, you cannot do better—if you desire to be thoroughly unpatriotic in regard to national economy—than take a ticket to Morlaix or some other place in Finistère—the most westerly, primitive and rugged of the modern departments that make up the old province of Brittany.

The monuments of that region are interesting rather than magnificent, and consist mainly of churches. There are a few *châteaux*, such as that of Kerjean, near St. Pol-de-Léon, now a national monument in the ownership of the State, and the most important house of its kind in Brittany. Built in 1560, it was partly burned down in the eighteenth century. One is shown "the lord's gibbet" still standing outside the castle. Brittany was a land of fierce passions, often the scene of outbreaks of revolt and fighting, and perhaps that is why there are so few large country-houses still standing. One has to go as far as Josselin, on the borders of Normandy, to see any example to rival Kerjean, which is not of the first order, and contains nothing of architectural importance, except a picturesque well-head.

Grand' Rue, Morlaix, showing mediæval Shopfronts in granite.

But country-houses of the smaller kind, manor-houses and farmhouses are to be found everywhere; and many of them are of great interest. In the Morlaix district they are built of the local granite and roofed with small thick slates. In colour and design they resemble the forms of Yorkshire or Wales rather than those of the Cotewolds, but there are many notable points of difference. Many of them have the circular turrets with conical roofs, such as one meets in "Scottish Baronial," itself derived from the French. In the farmyard the manure is knee-deep or more, as a rule, and the surrounding barns usually have stone walls and slated roofs like the house.

Adjoining is a stone well-house, sometimes of a most picturesque character, as at the farm of Rufellic, on the coast near Plougasnou, where there is also a fine triple gateway in the great stone wall enclosing the farm buildings. The quaintly-shaped door-heads and window-heads in these buildings recall the Yorkshire dales, but mullioned windows—if they exist at all—are seldom seen.

Morlaix itself contains some fine examples of town-houses, framed in timber with overhanging fronts, of which the sketch on this page shows a typical group. Only the lowest stage appears to be of great age, and the corbelled granite piers of the shopfront carry enormous oak beams or fascias with Gothic mouldings. The shafts worked on the angles of the piers have Gothic bases and stops. One may therefore safely regard these as very ancient shops, comparable perhaps with the famous English example at Lavenham. The overhanging upper stories are boldly corbelled, and may be contemporary with the shopfronts below, but obviously the sash windows are of later date. The finest house in Morlaix is the Maison de la Duchesse Anne, so called from its alleged association with Anne of Brittany (1477-1514). It is half-timbered on a granite base, with the bold framing exposed internally and a magnificent spiral staircase in wood with solid oak steps, and a wonderful continuous newel post, richly carved, as is the exterior. The building has been well restored, and may be visited. There is another fine staircase at No. 14, Grand' Rue, nearly opposite the houses illustrated here. This narrow cobbled street in the centre of the old town was formerly the chief thoroughfare, and within these lofty dwellings lived the owners and captains of the famous Morlaix privateers, who had a great reputation in the sixteenth century, when the shopfronts in my sketch were probably built.

The two finest churches of the district are at St. Pol-de-Léon, on the coast north of Morlaix. This small town, chiefly concerned in supplying early vegetables to England and Paris, contains a cathedral of fair size, with two western towers, a building of the 13th and 14th centuries, in the best middle pointed style. The arcaded triforium is the chief feature of interest, but the whole cathedral is an excellent design. Rather later in date is the Chapelle-du-Creisker, a large church with a magnificent spire, 283 ft. high, which is a prominent landmark, and a beautiful sculptured portal known as the "Lepers' Door." There is also a notable rose-window. Most of the churches in the district have two uncommon features: massive carved tie-beams across the nave, and a range of gables over the aisles, one gable over each bay. Although granite is the normal build-

ing material, there is an abundance of bold carving everywhere.

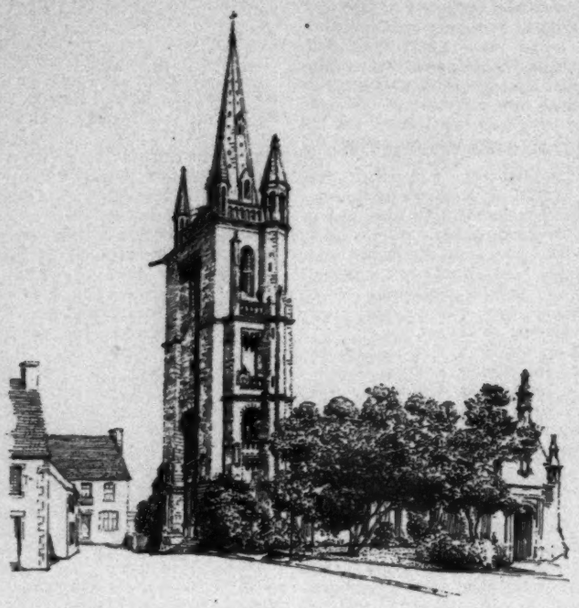
Near St. Pol-de-Léon is the small but perfect church of Lambader, a "national monument" built in the fifteenth century, which contains one of the finest oak rood-screens in France, with the loft complete and a spiral staircase. Unfortunately, the death-watch beetle, or one of its cousins, has begun to play havoc with this masterpiece.

Morlaix itself possesses the fine church of St. Mélaine in flamboyant Gothic, the sixteenth-century tower of St. Mathieu, and a curiously altered church with a notable rose-window which formed part of a Dominican or Jacobin convent, now used as barracks. The lower part of the church is now a fire-station. The upper part serves as the local picture-gallery and museum, a floor having been inserted at the level of the springing of the main arches. Thus the internal effect is completely spoiled, although the main structure has been preserved intact. It may be observed that the lover of old stained glass will find little to please him in this district. There is stained glass in plenty, but most of it is both modern and poor.

West of Morlaix, on the way to Brest, there is a wonderful Renaissance church (1599, etc.) at St. Thégonnec, containing much remarkable sculpture of the seventeenth century; and a fine Gothic church at Le Folgoët, where there is an important *Pardon* (described below) on September 8 annually. Here again, although granite is used, there is an abundance of sculpture, and the beautiful flamboyant rood-screen is in this material. North-east of Morlaix are several important churches, of which two are illustrated here. The church at Plougasnou (see sketch on this page) has a prominent Gothic spire with pinnacles and a Renaissance west door. The upper part of the spire here, as in some other examples, is freely perforated with openings, either to reduce the weight or to break the force of the gales which rage over western Brittany in the winter months. There is an interesting south porch of the early Renaissance, just visible on the sketch. This church is a national monument.

A mile away is the more famous church of St. Jean-du-Doigt, so called because a finger of St. John is its most valued possession. This grisly relic is presumably the reason of the annual *Pardon* which is held here. My sketch (on page 873) shows the noble western tower, the porch, and the beautiful and unusual arcaded gallery which connects the two. Mention may also be made of interesting churches in this neighbourhood at Guimaëc and at Kernitron, near Lanmeur, the latter a national monument of Romanesque date.

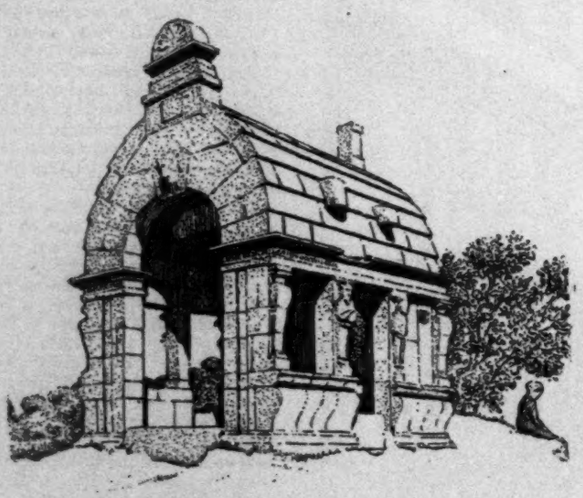
But perhaps a visitor is most impressed by the subsidiary structures which adjoin many of these Breton churches. There are ossuaries or bone-houses at St. Jean-du-Doigt and at St. Thégonnec; the latter a most elaborate Renaissance design (1675). At each of these churches there is also a triumphal arch, Gothic at St. Jean-du-Doigt, Renaissance (1587) at St. Thégonnec. And at St. Juan-du-Doigt there is a Renaissance fountain which would look perfectly at home in a Roman piazza. Last of all, there are calvaries, outside every church and at nearly every cross-roads. Some of these are very simple and rustic, others are extremely elaborate, such as that at St. Thégonnec. Most of them are old, but it is significant that some have been recently restored with realistic figures in colour, showing that Catholicism is a living faith in Brittany.



The Church, Plougasnou, Finistère.

My remaining sketch (on this page) illustrates an oratory between Plougasnou and St. Jean-du-Doigt which is surely an architectural curiosity. It was built in the sixteenth or seventeenth centuries, and a record book on Brittany points out that the only other buildings of this type known to exist are in far-away Lydia, adding very pertinently that the chances of the architect knowing of such buildings is slight but perhaps possible. This remarkable structure is in granite and attracts French (and English) maidens, who are assured that they will marry within a year if they deposit a lock of hair in a certain recess. The little building is disused and open to the winds of heaven on all sides.

The most impressive feature of life in Brittany to-day, as all writers agree, is the series of religious ceremonies and processions known as *Pardons*, held annually at certain famous shrines such as Le Folgoët and St. Jean-du-Doigt. It was my good fortune to witness the former, and it is an unforgettable sight. From the villages around came some thousands of people of all ages in little processions, dressed in their local costumes and bearing their church banners and relics. After a lengthy mass in the beautiful church they passed in procession round the village green, singing as they went, and finally dispersed after hearing a sermon by the venerable Bishop of Vannes and receiving his benediction.



Oratory near Plougasnou, Finistère (early 17th Century).

R.I.B.A.

Following are notes from the minutes of the Council for November 2:—

The Fellowship.—The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925:—Mr. Eric Percival Trewern (Queensland); Mr. W. J. Walker Todd (L.) (Edinburgh).

Election of Students.—The following probationers were elected as students of the R.I.B.A.:—

Abraham, J. G. (A.A.).
Baker, H. G. (Birmingham Sch. of Arch.).
Baxter, J. R. (Liverpool Sch. of Arch.).
Bent, E. L. (Leicester Col. of Arts & Crafts).
Brown, J. H. (Liverpool Sch. of Arch.).
Cook, W. K. (Special Exemption).
Dickinson, Catherine (Birmingham Sch. of Arch.).
Gasson, A. S. (Special Exemption).
Grice, K. J. (Birmingham Sch. of Arch.).
Hansford, Edith E. (Univ. of Manchester).
Hickton, E. H. (Birmingham Sch. of Arch.).
Holden, G. T. (Liverpool Sch. of Arch.).
James, Margaret J. (Edinburgh Col. of Art).
Ledoyen, A. (Birmingham Sch. of Arch.).
Maunder, F. A. C. (Armstrong Col., Newcastle).
Maung, M. (Special Exemption).
Miles, E. G. R. (Liverpool Sch. of Arch.).
Prince, W. H. (Leicester Col. of Arts and Crafts).
Redgrave, C. F. (Birmingham Sch. of Arch.).
Robson, W. C. (Birmingham Sch. of Arch.).
Rowledge, D. H. (Birmingham Sch. of Arch.).
Saurin, C. P. (Univ. of London).
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ARCHITECTURE AND THE PUBLIC

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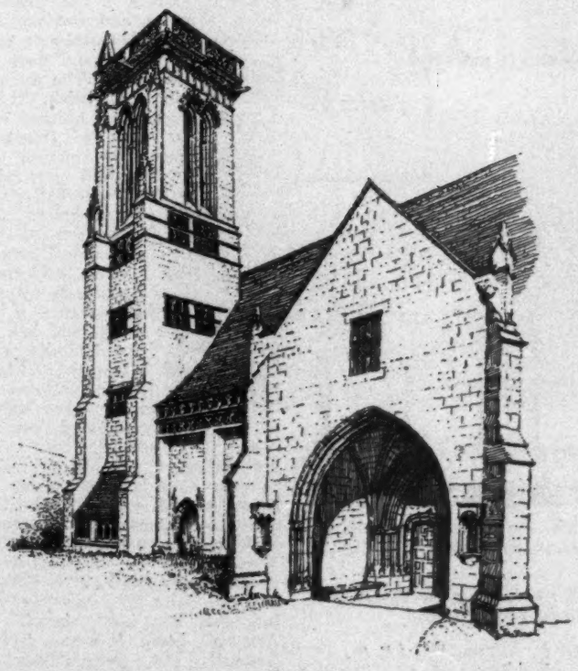

The Church, St. Jean-du-Doigt, Finistère.

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ing material, there is an abundance of bold carving everywhere.

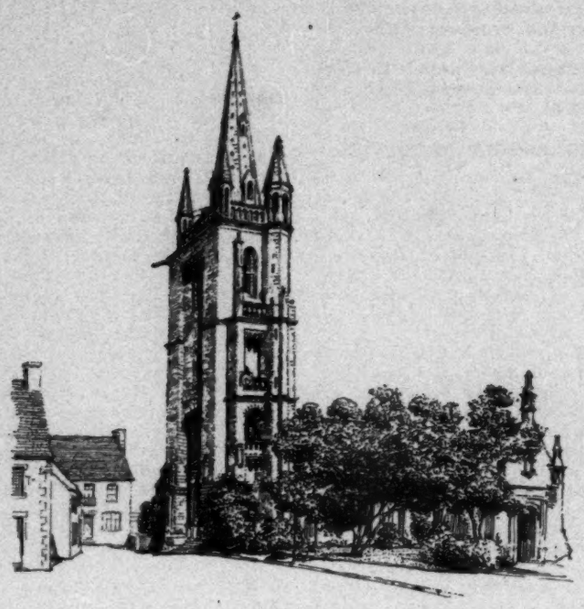
Near St. Pol-de-Léon is the small but perfect church of Lambader, a "national monument" built in the fifteenth century, which contains one of the finest oak rood-screens in France, with the loft complete and a spiral staircase. Unfortunately, the death-watch beetle, or one of its cousins, has begun to play havoc with this masterpiece.

Morlaix itself possesses the fine church of St. Mélaine in flamboyant Gothic, the sixteenth-century tower of St. Mathieu, and a curiously altered church with a notable rose-window which formed part of a Dominican or Jacobin convent, now used as barracks. The lower part of the church is now a fire-station. The upper part serves as the local picture-gallery and museum, a floor having been inserted at the level of the springing of the main arches. Thus the internal effect is completely spoiled, although the main structure has been preserved intact. It may be observed that the lover of old stained glass will find little to please him in this district. There is stained glass in plenty, but most of it is both modern and poor.

West of Morlaix, on the way to Brest, there is a wonderful Renaissance church (1599, etc.) at St. Thégonnec, containing much remarkable sculpture of the seventeenth century; and a fine Gothic church at Le Folgoët, where there is an important *Pardon* (described below) on September 8 annually. Here again, although granite is used, there is an abundance of sculpture, and the beautiful flamboyant rood-screen is in this material. North-east of Morlaix are several important churches, of which two are illustrated here. The church at Plougasnou (see sketch on this page) has a prominent Gothic spire with pinnacles and a Renaissance west door. The upper part of the spire here, as in some other examples, is freely perforated with openings, either to reduce the weight or to break the force of the gales which rage over western Brittany in the winter months. There is an interesting south porch of the early Renaissance, just visible on the sketch. This church is a national monument.

A mile away is the more famous church of St. Jean-du-Doigt, so called because a finger of St. John is its most valued possession. This grisly relic is presumably the reason of the annual *Pardon* which is held here. My sketch (on page 873) shows the noble western tower, the porch, and the beautiful and unusual arcaded gallery which connects the two. Mention may also be made of interesting churches in this neighbourhood at Guimaëc and at Kernitron, near Lanmeur, the latter a national monument of Romanesque date.

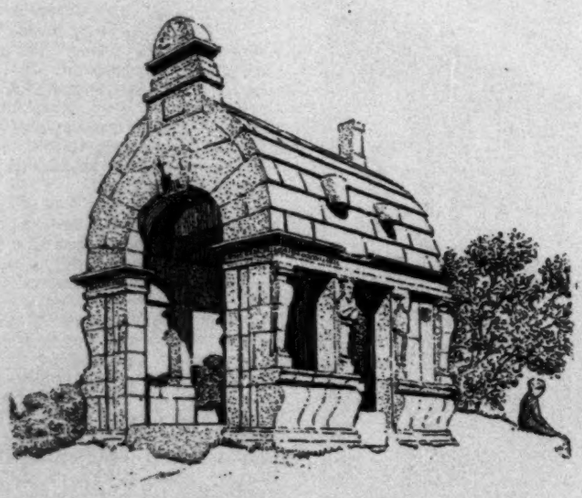
But perhaps a visitor is most impressed by the subsidiary structures which adjoin many of these Breton churches. There are ossuaries or bone-houses at St. Jean-du-Doigt and at St. Thégonnec; the latter a most elaborate Renaissance design (1675). At each of these churches there is also a triumphal arch, Gothic at St. Jean-du-Doigt, Renaissance (1587) at St. Thégonnec. And at St. Juan-du-Doigt there is a Renaissance fountain which would look perfectly at home in a Roman piazza. Last of all, there are calvaries, outside every church and at nearly every cross-roads. Some of these are very simple and rustic, others are extremely elaborate, such as that at St. Thégonnec. Most of them are old, but it is significant that some have been recently restored with realistic figures in colour, showing that Catholicism is a living faith in Brittany.



The Church, Plougasnou, Finistère.

My remaining sketch (on this page) illustrates an oratory between Plougasnou and St. Jean-du-Doigt which is surely an architectural curiosity. It was built in the sixteenth or seventeenth centuries, and a record book on Brittany points out that the only other buildings of this type known to exist are in far-away Lydia, adding very pertinently that the chances of the architect knowing of such buildings is slight but perhaps possible. This remarkable structure is in granite and attracts French (and English) maidens, who are assured that they will marry within a year if they deposit a lock of hair in a certain recess. The little building is disused and open to the winds of heaven on all sides.

The most impressive feature of life in Brittany to-day, as all writers agree, is the series of religious ceremonies and processions known as *Pardons*, held annually at certain famous shrines such as Le Folgoët and St. Jean-du-Doigt. It was my good fortune to witness the former, and it is an unforgettable sight. From the villages around came some thousands of people of all ages in little processions, dressed in their local costumes and bearing their church banners and relics. After a lengthy mass in the beautiful church they passed in procession round the village green, singing as they went, and finally dispersed after hearing a sermon by the venerable Bishop of Vannes and receiving his benediction.



Oratory near Plougasnou, Finistère (early 17th Century).

R.I.B.A.

Following are notes from the minutes of the Council for November 2:—

The Fellowship.—The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925:—Mr. Eric Percival Trewern (Queensland); Mr. W. J. Walker Todd (L.) (Edinburgh).

Election of Students.—The following probationers were elected as students of the R.I.B.A.:—

Abraham, J. G. (A.A.).
Baker, H. G. (Birmingham Sch. of Arch.).
Baxter, J. R. (Liverpool Sch. of Arch.).
Bent, E. L. (Leicester Col. of Arts & Crafts).
Brown, J. H. (Liverpool Sch. of Arch.).
Cook, W. K. (Special Exemption).
Dickinson, Catherine (Birmingham Sch. of Arch.).
Gasson, A. S. (Special Exemption).
Grice, K. J. (Birmingham Sch. of Arch.).
Hansford, Edith E. (Univ. of Manchester).
Hickton, E. H. (Birmingham Sch. of Arch.).
Holden, G. T. (Liverpool Sch. of Arch.).
James, Margaret J. (Edinburgh Col. of Art).
Ledoyen, A. (Birmingham Sch. of Arch.).
Maunder, F. A. C. (Armstrong Col., Newcastle).
Maung, M. (Special Exemption).
Miles, E. G. R. (Liverpool Sch. of Arch.).
Prince, W. H. (Leicester Col. of Arts and Crafts).
Redgrave, C. F. (Birmingham Sch. of Arch.).
Robson, W. C. (Birmingham Sch. of Arch.).
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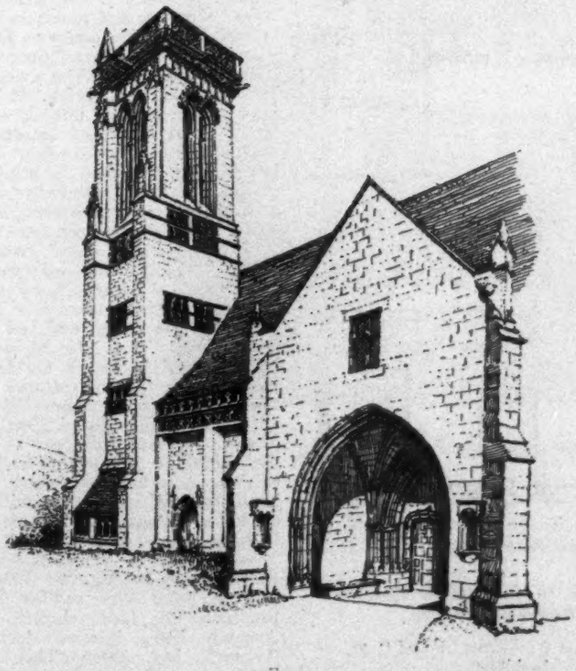

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ILLUSTRATIONS

PLATES.

Claridge's Hotel Extensions.

Claridge's Hotel, at the corner of Brook-street and Davies-street, has been greatly enlarged by the addition of a new block of buildings, which covers the whole of the area between the original hotel and the Guards Club. The new building has an attractive front to Brook-street. The lower part, which comprises the new ballroom entrance and shops on either side of it, is faced with Roman stone and black marble and conforms in design with the main entrance to the hotel which was added a year or two ago. The upper part is of brick, the upper stories with their golden balconies being set back. The painted heraldic arms of the City of Westminster and of the hotel and the treatment of the flagstaffs add a touch of gaiety.

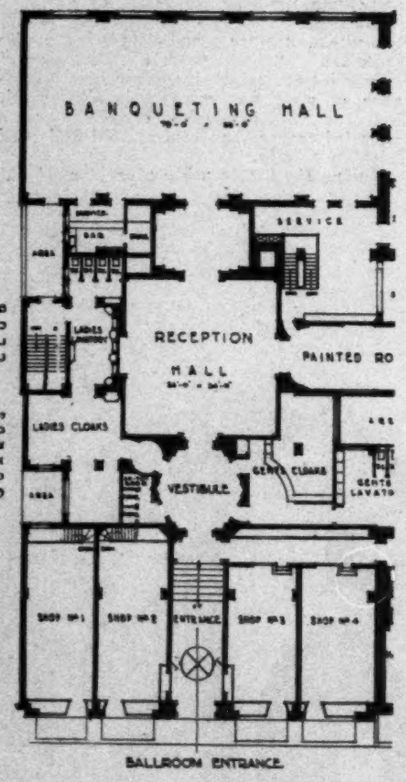
Brook-street, as its name implies, was once the crossing of a stream, a tributary of the Tyburn Brook, and when excavating for the new building water and a sandy loam were encountered. These created difficult problems in the construction of the foundations for so high a building. Against the wall of the existing hotel a continuous row of steel sheet piling had to be driven to contain the water and soft sand. A concrete foundation some 4 ft. thick and reinforced with 75 tons of steel was then laid over the whole area of the extension; on this foundation the 1,140 tons of steel framework supporting the nine floors of the new building were erected. By skilful planning the new building has been perfectly connected on all floors with the corridors of the old hotel, so that inside the division between new and old will be scarcely perceptible. The upper floors are entirely occupied with suites of bedrooms, dressing rooms, bathrooms and salons. Much thought has been expended on the planning of them; everywhere the rooms are light and airy, and all are provided with inner corridors or lobbies, which separate them from the main corridors in order to ensure perfect quiet. Every bedroom has its own bathroom and in many cases its own dressing-room. The heating of the rooms is by radiating panelled surfaces, which engender a pleasant warmth without unduly heating the air. Every room has its individual scheme of decoration and lighting.

The ground floor is occupied by the new ballroom and banqueting room suite and its necessary services. The ballroom, measuring 80 ft. by 40 ft., is a finely proportioned room lit in the daytime by large windows along one side. Its general scheme of decoration, in silver and green, is fresh and modern, and the room, with its mirrored walls and concealed lighting, has a very dignified air. It is enlivened by panels painted by Mr. George Sheringham, the artist, who has also carried out some panels in the ante-room. The whole of the decorations on this floor have been designed by the architect of the building. The walls of the small room leading from the lounge of the hotel to the new reception room, known as the "Painted Room," have been painted in a delicate and decorative way by Miss Mary Lea.

The heating of the public rooms is contrived by warming the marble floors themselves; this gives a very comfortable and well-distributed warmth. Perfect ventilation, too, is provided in the ballroom, by continual circulation of fresh air introduced at the ceiling level and extracted near the floor. In the basement are the kitchen quarters and all the mechanical apparatus necessary to the perfect service of a modern hotel. The building was completed in 12 months, a feat which reflects great credit upon the part of architect, contractors and everyone concerned.

The architect for the building and decorative work is Mr. Oswald P. Milne, F.R.I.B.A., and Sir John Wolfe Barry and Partners were engineers for the foundations and steel construction. Messrs. Bovis, Ltd., were the general contractors.

Amongst the principal sub-contractors were:—Bath Artcraft, Ltd., furniture; Burn Bros., hot and cold water supplies; Benham and Sons, Ltd., kitchen equipment; Birmingham Guild, Ltd., metalwork; Burke, Ltd., marblework; Burkle and Sons, Ltd., woodwork and fitments; Henry Boyer, Ltd., demolition; Bysouth, Ltd., Portland stone; Caxton Floors, Ltd., flooring; Cashmore Metalworkers, Ltd., metalwork; T. Clarke and Co., electrical work; Comyn Ching, Ltd., door furniture, metalwork, heating; Chisholm and Co., decorative plasterwork; Dreyfous, and Tucker and Edgar, Ltd., electrical fittings; Dorman, Long and Co., Ltd., steelwork; Doulton and Co., Ltd., and Leeds Fireclay, Ltd., sanitary fittings; Everett, Edgcumbe and Co., Ltd., electrical clocks; Express Lift Co., lifts; Farmiloe, glazing; E. G. Garton, metalwork, canopy; Hobbs, Hart, Ltd., locks; Howard and Sons, Ltd., ballroom floor; Hollis Bros., Ltd., wood block floors; Harrowell, facing bricks; G. A. Harvey and Co., Ltd., metal grilles; Byron Imison, metalwork; Insulite Products, Ltd., "Insulite" boarding; Jetley, Ltd., decorations (ground floor, ballroom, etc.); Jeffreys, Ltd., ventilating engineers; Jenkins, Ltd., marble work; J. C. King, Ltd., pavement lights; Kingsmill Metal Co., metalwork, external railings, etc.; W. Knight and Co., stone work; London Sand Blast Co., mirrors and glass; Lamson Pneumatic Tube Co., vacuum plant; Light Steelwork Co., service stair; Moler Products, Ltd., partitions; Eric Munday, Ltd., metalwork, shop showcases; Malcolm McLeod, precast stairs; McGruer Hollow Spar Co., flagstaffs; Mather and Platt, Ltd., sprinklers; F. H. Pride, Ltd., electrical fittings; J. Powell, Ltd., glassware; Roberts, Adlard and Co., slating; Rogers, Son and Co., tiling; Ragusa Asphalte Co., asphalt; Samouelle, Ltd., plumbing; Gilbert Seale, internal plasterwork; Shaw's Glazed Brick Co., faience and glazed bricks; Tricity, Ltd., fires; Venesta, Ltd., "Plymax" panels; Williams and Williams, Ltd., metal windows; Wilton Royal Carpet Co., carpets; and Willment, Ltd., excavations.



Extensions to Claridge's Hotel: Ground-Floor Plan.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.

Royal Academy of Dramatic Art, W.C.

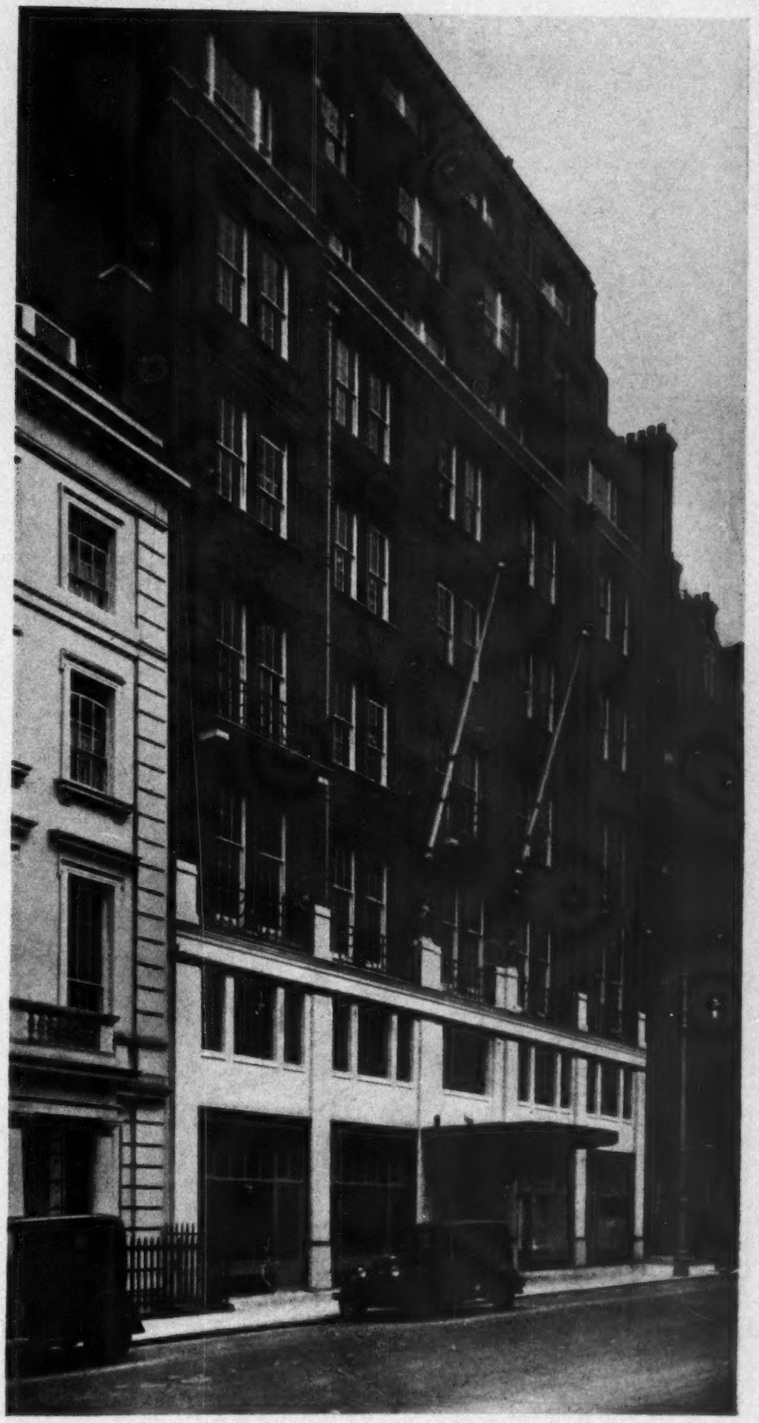
The buildings illustrated this week replace two typical Gower-street houses, Nos. 62 and 64, and are additional premises for the Royal Academy of Dramatic Art, whose site, going through to Malet-street, carries the main theatre, etc. The new building consists of a sub-basement and five floors, the former containing a small theatre to hold 175 persons and fitted with up-to-date lighting. The ground floor comprises administrative offices and the mezzanine floor dressing rooms in connection with the theatre. The first and second floors hold classrooms and the third or top is given over to refectory and caretaker's quarters. The difficulty of preventing reverberation in the large and bare classrooms was overcome by using thatchboard partitions. The façade of the building is in 2 in. mottled brick with Portland stone from mezzanine to ground floor. The figures over the entrance were carved *in situ* by Mr. Alan L. Durst.

The architects are Messrs. Swan, Norman and Clay, FF.R.I.B.A., and Mr. A. Wilby, A.R.I.B.A. The engineering consultant was Dr. Oscar Faber; the electrical consultant, Mr. E. McGregor Duncan, and the consultant for acoustics, Mr. Hope Bagenal, A.R.I.B.A.

The general contractors were Messrs. C. F. Kearley, Ltd., and amongst the sub-contractors are:—Masonite, Ltd., "Presdwood"; Ridge and Aldred, stage lighting; David Colville & Sons, structural steelwork; Caxton Floors, Ltd., hollow tile floors; Cecil Cooper & Co., electrical installation; Marryat & Scott, lift installation; Thos. Collier, bricks; Adrian Stokes & Co., wrought ironwork; Camden Tile Co., terrazzo flooring; Norris & Co., escape staircases and stage bridges; Salter, Edwards & Co., roof asphalt; Synchronome Co., clocks; Silpor, Ltd., and Heat and Sound Insulation, Ltd., partitions; Pyrene Co., Ltd., fire appliances; Jones Lock Co. and Ramsay & Co., door furniture, etc.; Shanks & Co., sanitary fittings; and R. W. Steele & Co., heating and theatre ventilation.

"June Cottage," Oxshott, Surrey.

"June Cottage," the home of Mr. J. Raworth Hill, L.R.I.B.A., A.I.A.A., A.I.Struct.E., was designed by himself. Its chief characteristic is its simplicity. Everything has been done to obtain a labour-saving plan. The plan is intended to contain the least possible amount of waste space, and the rooms arranged to obtain the beautiful views to back and front. The greatest space has been allowed for the lounge and best bedroom, in order that there shall be two good-sized rooms in the house. There are three bedrooms, and provision has been made in the construction easily to extend to form a loggia on the ground floor and a further bedroom upstairs. The main walls of the house are built of brick, 11 in. thick with 2 in. cavity, and are finished externally with a cream "Atlas White" smooth texture. The roof is covered with black double Roman interlocking tiles laid to a pitch of 30 degrees. The doors externally, window frames and pipes are emerald green. A small "Ideal Classic" boiler has been installed in kitchen for hot water and central heating apparatus, thermostatically controlled; the cooking and supplementary heating is by gas, except in the lounge, where there is a large open fire on dogs. The lounge and hall floors are laid with "Bagac" wood blocks, whilst the main bedroom and bathroom are laid with compressed cork tiles in patterns. The decorations are simple on modern lines, the walls of all rooms being stippled from a full tone of colour to a very pale tone at the centre of the ceiling. No picture rails or moulded cornices have been employed. The cost of house worked out approximately at 1s. 5d. per ft. cube. Among the sub-contractors were: Heating and drainage, John Knight and Son (Chelsea), Ltd.; wood block floors, the Acme Flooring and Paving Co. (1904), Ltd.; cork flooring, John Elbo; sanitary fittings, Doulton and Co., Ltd.; electric light fittings, Arnault, Ltd.; internal decorations, Bath Artcraft, Ltd.; paint, Thos. Parsons and Sons.

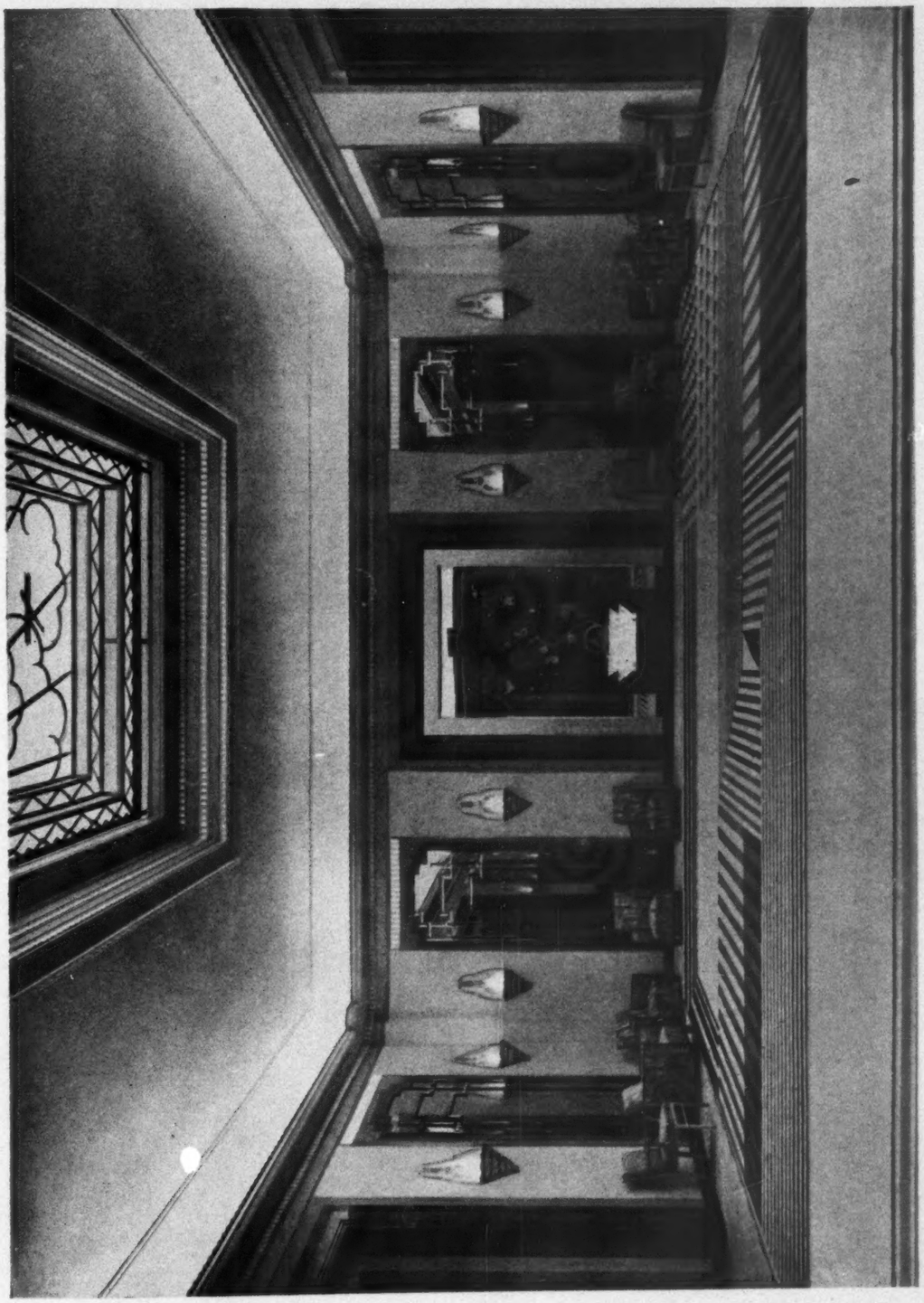


Extensions to Claridge's Hotel, Brook Street, W.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.

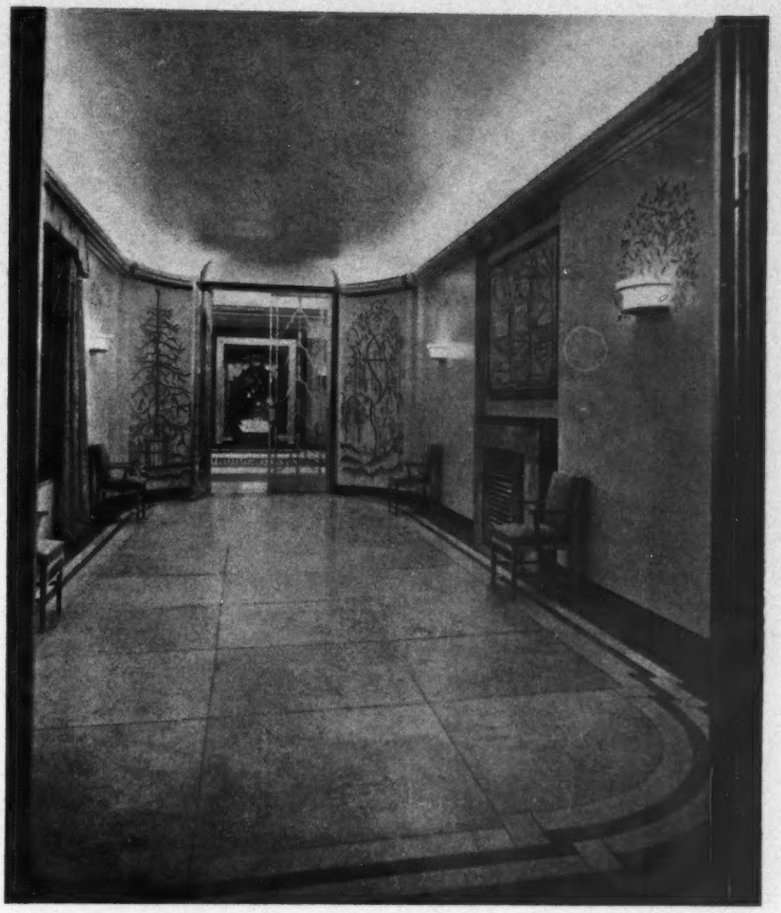
Extensions to Claridge's Hotel, Brook Street, W.: Hexagonal Vestibule, looking towards Entrance.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.

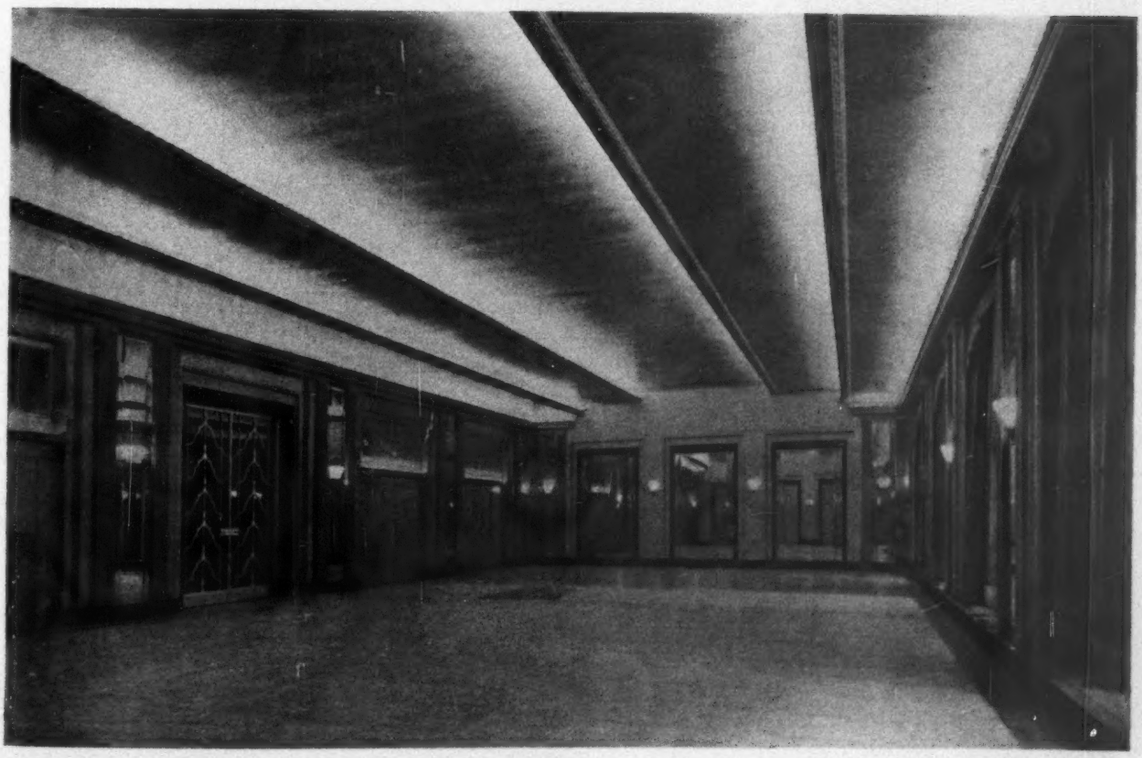


Extensions to Claridge's Hotel, Brook Street, W.: The Reception Hall.

Mr. Oswald P. Milne, F.R.I.B.A., Architect.



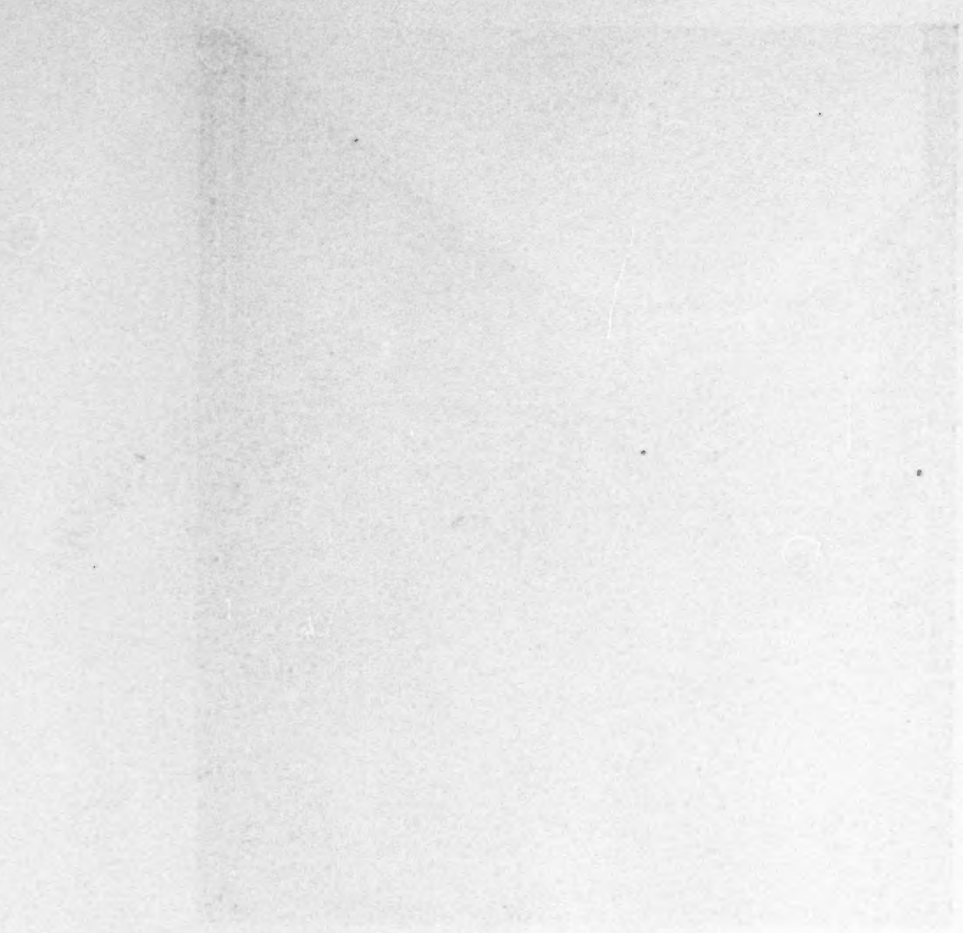
THE PAINTED ROOM.

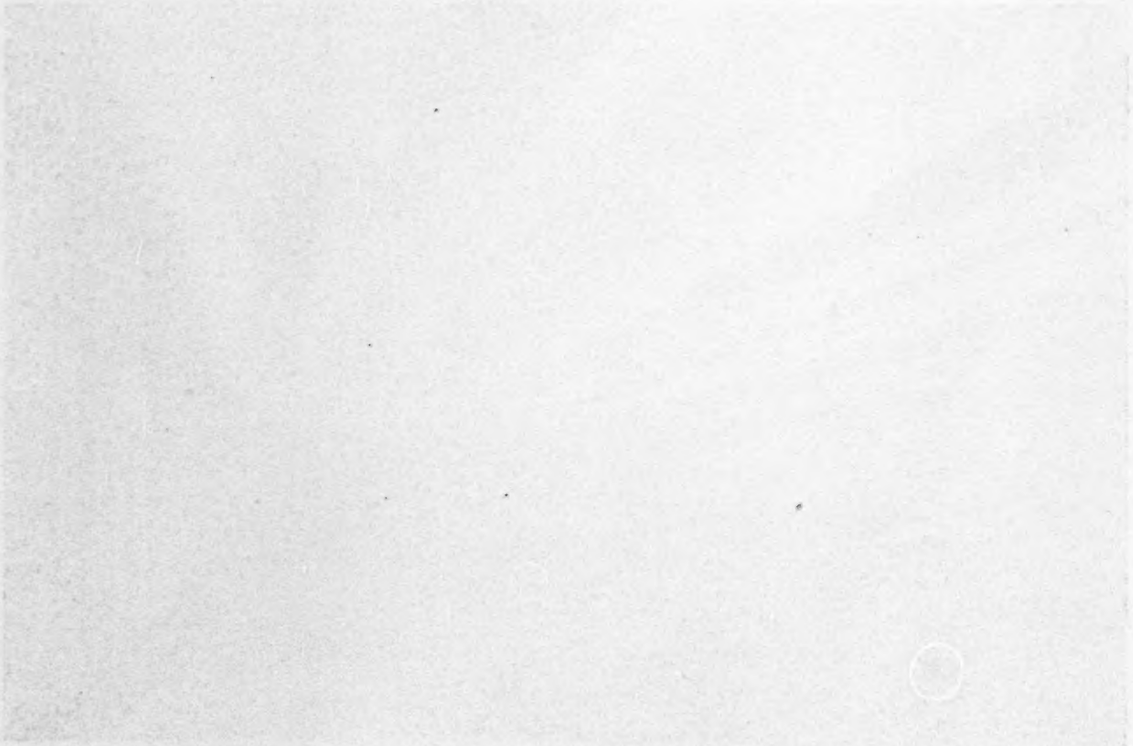


THE BALLROOM.

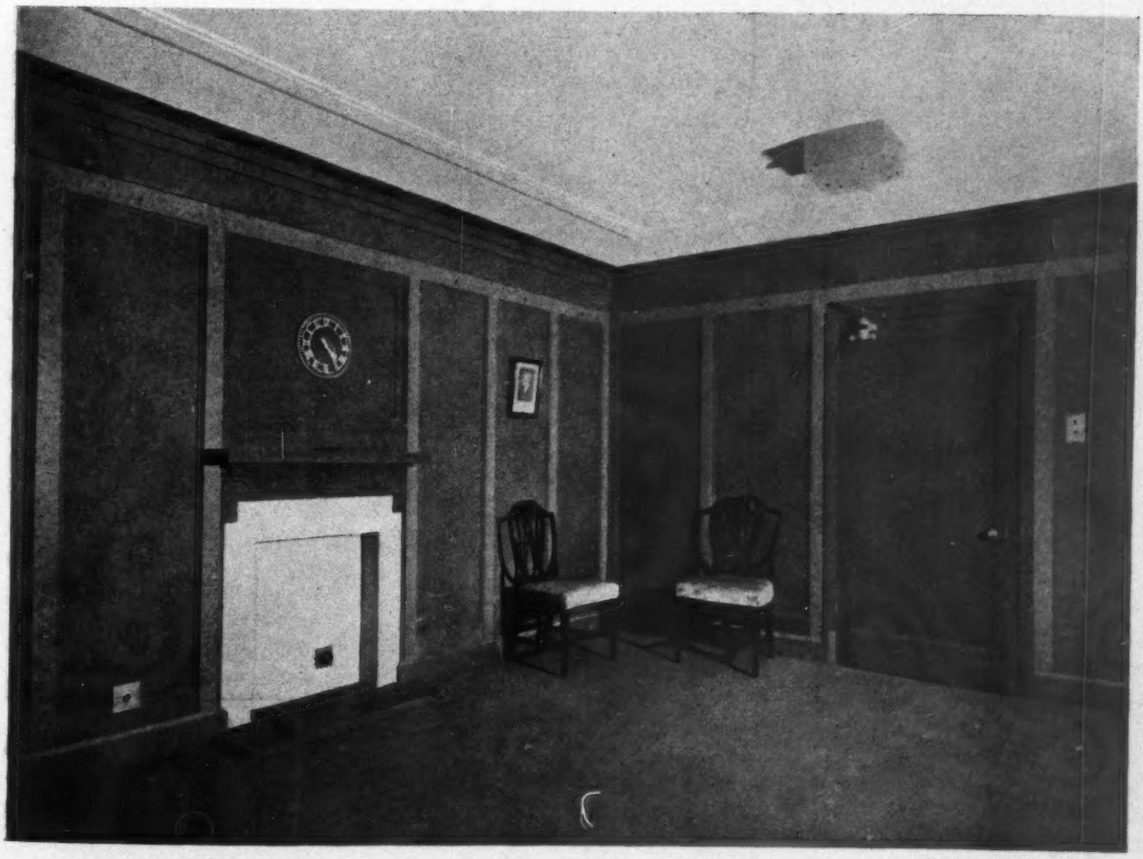
Extensions to Claridge's Hotel, Brook Street, W.

MR. OSWALD P. MILNE, F.R.I.B.A., Architect.





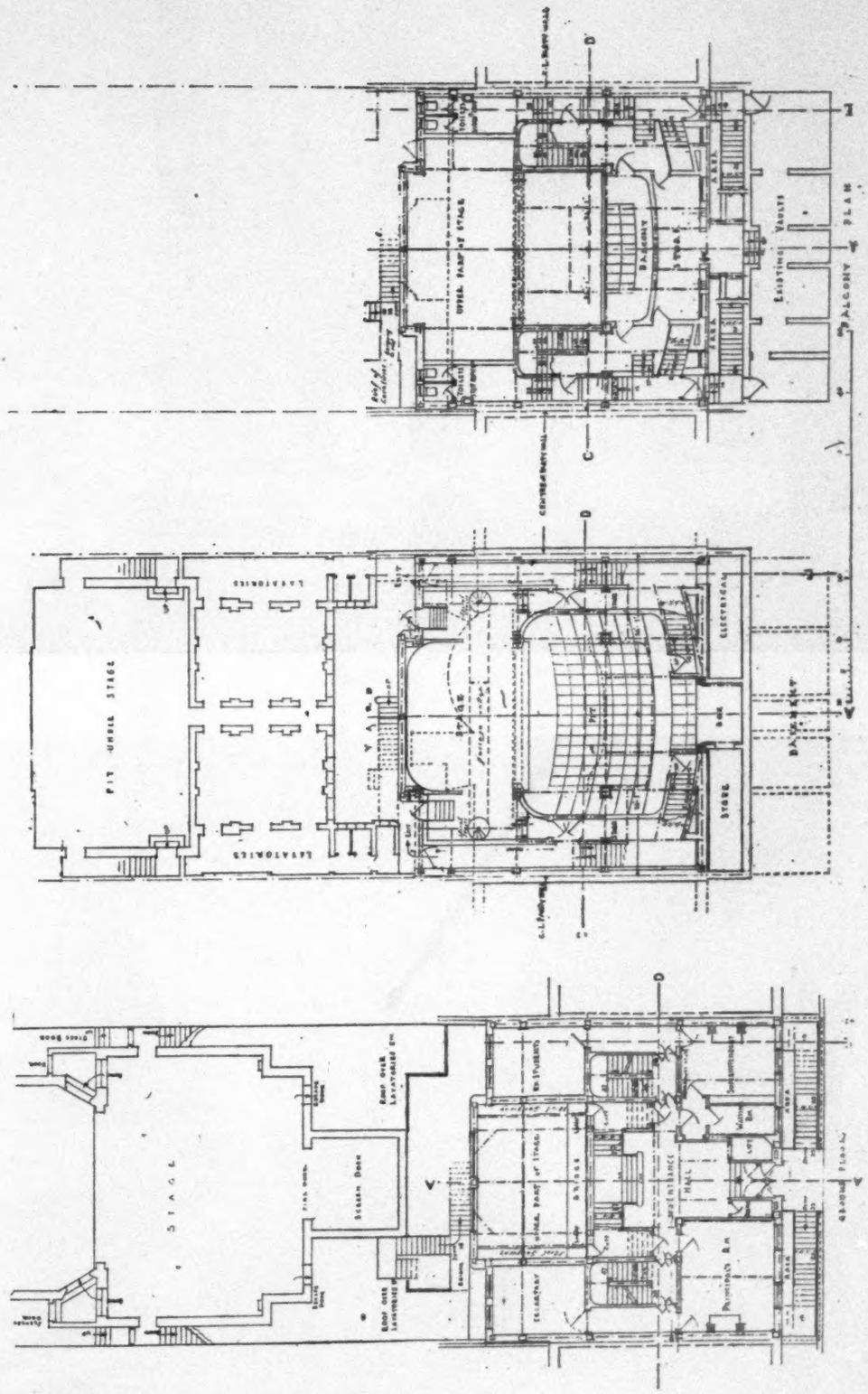
DETAIL OF ENTRANCE.



THE BOARD ROOM.

The Royal Academy of Dramatic Art, Gower Street, W.C.

MESSRS. SWAN, NORMAN & CLAY, FF.R.I.B.A., and MR. A. WILBY, A.R.I.B.A., Architects.



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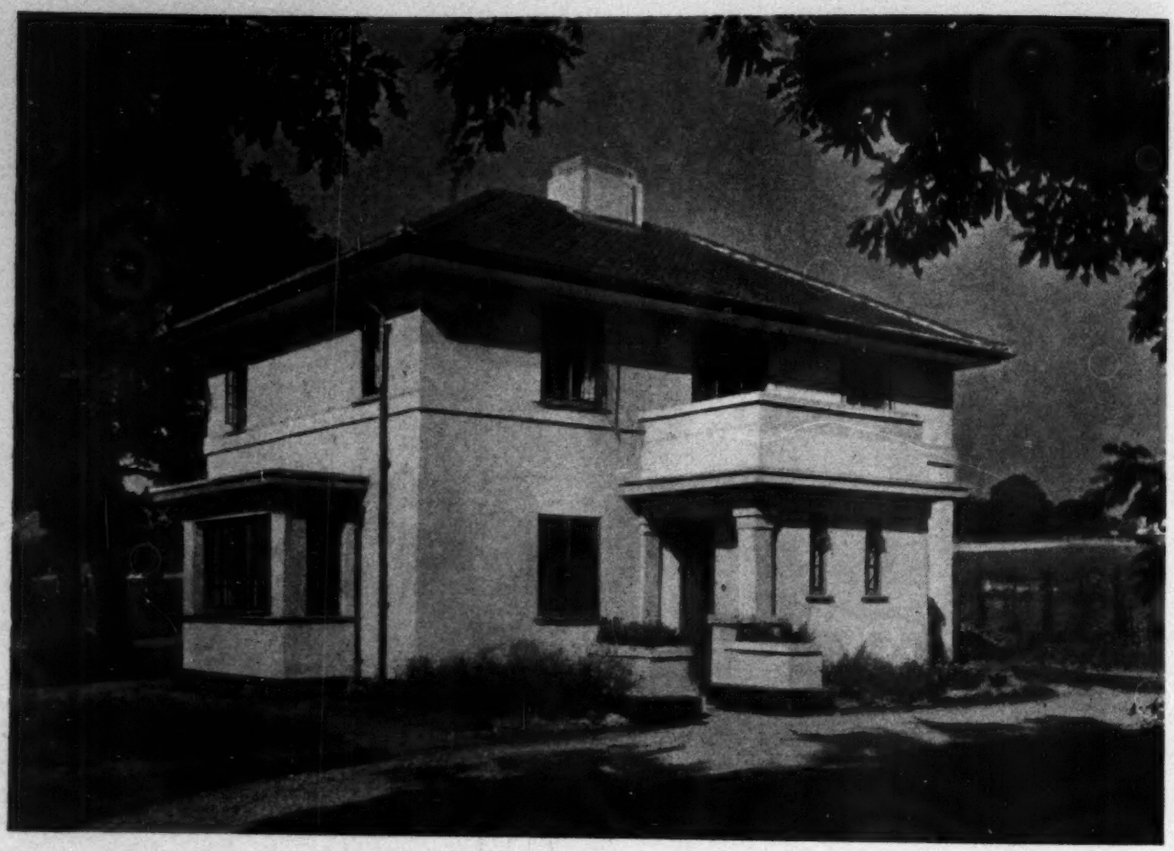
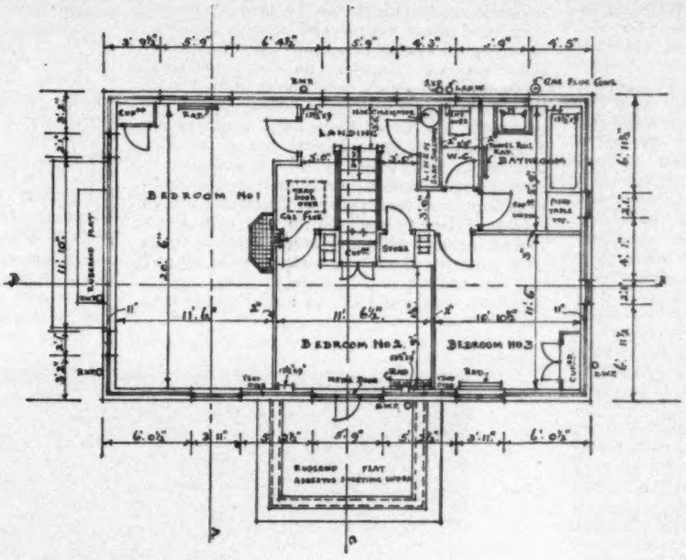


VIEW FROM SOUTH-WEST.

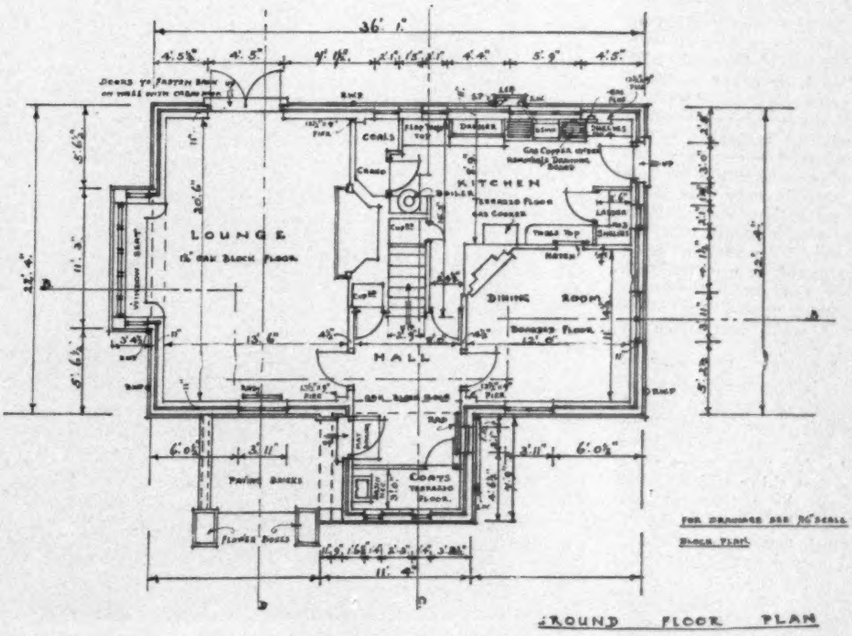
THE LOUNGE.

"June Cottage," Oxshott.

MR. J. RAWORTH HILL, L.R.I.B.A., Architect.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

"June Cottage," Oxshott.

Mr. J. Raworth Hill, L.R.I.B.A., Architect.

THE INFLUENCE OF MODERN MATERIALS ON ARCHITECTURE

THE city of the future, with towers probably a quarter of a mile apart, set in pleasant gardens, was envisaged by Mr. Joseph Emberton, F.R.I.B.A., in a lecture on "The Influence of Modern Materials in Architectural Treatment" at a meeting of the Birmingham Architectural Association.

The times in which we lived, said the lecturer, seemed to be out of joint. We found ourselves in a situation in which the scientific inventions and mechanical improvements of the last quarter of a century necessitated fundamental changes in our social existence. Public authorities were building houses which cost in rent from 12s. to 15s. a week, while the people who lived in them could only afford from 8s. to 10s. Architecture affected this sad state of affairs in two ways: (1) the houses were costing too much and (2) we were not obtaining the full value from mechanical devices used in manufacture on account of heavy overhead charges, created to some extent by out-of-date methods of building in factory, office, and shop. Generally the houses which were being built did not give to working people the comfort to which they should be entitled in these enlightened days. We were still building more or less the same type of accommodation which had been provided for the last 300 years. We were not taking advantage of the mass-produced and scientific building materials which were so plentiful. The reason for this was that to obtain economy by the use of these new materials and services the unit dwelling must be larger than the cottage or a pair of cottages. We could not advantageously employ the steel frame or reinforced concrete nor instal central heating economically in so small a unit as the cottage.

Another aspect of the present policy which provided accommodation for the masses by small detached or semi-detached cottages was the extravagant use of land and the destruction of potential food-producing areas or pleasure grounds, at the same time forming large scattered suburban areas, making it necessary for people in the centre of towns to pass through miles of dull and uninteresting regions in order to enjoy the pleasant conditions of the open country. The obvious solution was to house the people in towers, with large open spaces around them, which could retain the existing trees and be formed into gardens of pleasure or the production of food. In the construction of these high communal buildings steel or reinforced concrete frames would be used, with thin panel walls of cork or other material of high insulative properties, faced on the outside with opaque glass, glazed cement, or other weather-resisting material. The use of steel or reinforced concrete would allow of large balconies so that the tenants and their children would enjoy the fresh air and views even more than was possible with the present form of cottage, with its usually untidy backyard. In such a large unit central heating could be economically employed, a common nursery with nurse provided, also a common wash-house. The tenants would elect a small committee to settle any communal question.

Dealing with the influence which modern materials should have in the towns, the lecturer said traffic was one of our most urgent troubles, and something more drastic than roundabouts and one-way streets would have to be done if people a few years hence were to move at all. The first thing which would have to be removed was the sentimental attitude which insisted that buildings of doubtful antiquarian interest should be retained long after they had ceased to perform any useful function and stand in the way of economical development. Our cities should be considered as efficient workshops. The present method of widening streets by a few feet and restricting the height of buildings to sixty or eighty feet would only delay the traffic crisis, perhaps for a generation, but not more. By then aeroplane traffic would have to be considered, and the street would be out of date. The city of the future would be a city of towers, probably a quarter of a mile apart, in pleasant gardens, with plenty of room for all sorts of traffic and a tube station at the bottom of each tower. Vertical travel by means of lifts was obviously more efficient than horizontal travel, with present congestion.

The lecturer made some further suggestions with regard to present conditions. Instead of restricting the height of buildings to an arbitrary figure like eighty feet, he said, an angle should be laid down from the centre of the streets, desirable from the point of view of light and air, and forming as it were an inclined building line for the upper portion of the building. A building owner, in consideration of giving up a proportion of his site for street widening, should be allowed to carry his building to any suitable height behind the inclined line. This would make it worth his while to acquire deeper sites, and these bigger and more economical units would enable him more fully to exploit the use of modern building methods. Present world conditions would undoubtedly help to purge building of much redundant ornament and drive their more conservative friends to the more logical use of modern materials. Buildings should be designed as efficient machines rather than monuments to ourselves, and then perhaps we should evolve forms of beauty—related to our own times—such as had been achieved in other fields of construction, such as aeroplanes, ships and railway engines. Yet none of these things had been designed from an aesthetic point of view.

BOOK REVIEW

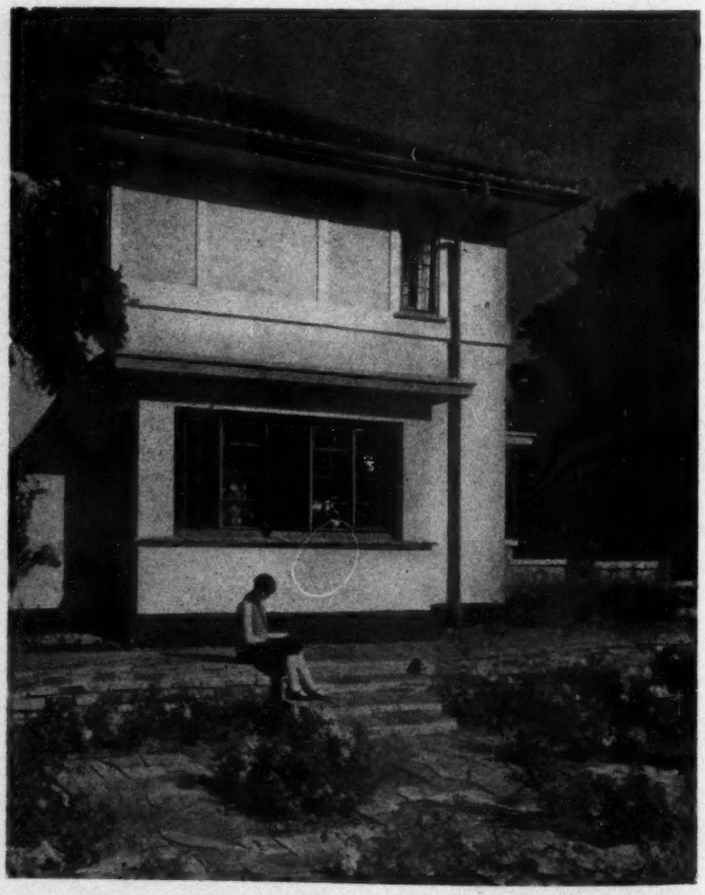
London Lanes. By ALAN STAPLETON. Illustrated with 40 Pencil Drawings by the author. London: John Lane, the Bodley Head. Pp. 252. Crown 8vo. (9½ in. × 6½ in.). Cloth gilt. 15s. net.

In street nomenclature, the term "lane" is loosely and capriciously applied. There are lanes and lanes of differing degrees and qualities. Much money is made, for instance, in Mincing-lane and much of it spent in Park-lane; which two in aspirations are as wide apart as the poles. "East is East and West is West," with all the welter of the great city between, and the twain may meet midway in Chancery-lane.

Mr. Alan Stapleton deals topographically with London lanes, and gives us details concerning 900 or more which may be found either in the maps of to-day or traced in bygone records. What is a lane, precisely? A narrow street—but how narrow? And how much narrower is an alley? The dictionary will give us, in each case, "a narrow street."

Mr. Stapleton, having so much material to delve in, confines himself, in the volume to hand, to those London thoroughfares which, irrespective of size or dignity, are now or have been positively called lanes. It is no light task to track out, as a single example, the evolution of Bercheruerelane, in 1190, into Birchin-lane as it is now writ on the corner. Some lanes may be dismissed in a line or two, but Drury-lane, with its lurid past, might, as he says, fill a long chapter.

London would scarcely be London without her lanes, and in that connection the volume, with its 40 pencil sketches, is a useful addition to London literature.



"June Cottage," Oxshott: View from Rose Garden.

MR. J. RAWORTH HILL, L.R.I.B.A., Architect.

LEGAL SECTION

NOTES ON CURRENT CASES

ANCIENT LIGHTS: RE-ERECTION OF DOMINANT TENEMENT.

THE recent case, *News of the World*, Ltd., *v.* Allen Fairhead and Sons, Ltd. (1931, 2 Ch. 402), raised in a concrete form that difficult question, How is the principle laid down in Colls *v.* Home and Colonial Stores, that to have any remedy for the obstruction of ancient lights, the plaintiff must prove that a nuisance has been caused, to be applied where portion of the ancient lights has been incorporated in the windows of a new structure, those windows having larger apertures, only corresponding in part with the old apertures? The facts of the case were as follows. The plaintiffs were lessees in occupation of premises, under a demise for a term of 94¼ years, from March 25, 1925, which were entitled to a right to light over the defendants' premises. Towards the end of 1925 the plaintiffs' premises were pulled down and a new building was erected with numerous windows fronting the defendants' premises. When the demolition took place a plan was prepared to obtain the district surveyor's licence, but no proper survey plan showing the partial coincidences between the old and new windows was produced, and the report states that it was clear that the plaintiffs' architect never had the question of preserving the ancient lights in mind at all; partial coincidences were inevitable, but they were purely fortuitous. After the completion of the plaintiffs' premises the defendants demolished their own building and commenced the erection of new buildings designed to be of much greater height than their old buildings, and in May, 1931, the plaintiffs commenced this action against them, claiming an injunction, damages and costs. The defence was that the plaintiffs had abandoned their ancient lights, and that in any event there was no nuisance.

On the first point, we need only say that the Court held that the mere lack of evidence of any intention to preserve the ancient lights was not by itself sufficient to prove an intention to abandon, even though the amount of coincidence between the old and the new windows was comparatively very small, but the lack of precise evidence of the identity of the ancient and non-ancient lights rendered it impossible to hold that there was any retention of light above the ground floor. On this first point we do not intend to make any observations except to emphasise the importance of making accurate plans of the size and position of windows with the right to ancient lights before demolishing a building containing them, as this is valuable evidence on a point on which the Court has to ascertain the presumed intention of the parties. This finding rendered it necessary to determine whether this obstruction to the windows on the ground floor, where there were undoubtedly substantial coincidences between certain new apertures and the old windows, was sufficient to constitute an actionable nuisance. The Court first referred to the case Higgins *v.* Betts (1905, 2 Ch. 210), where it was laid down that the test of nuisance is not how much light is taken, but how much is left, and said the question was how is that test to be applied? The plaintiffs relied upon the opinion expressed by Lord Lindley in Colls *v.* Home and Colonial Stores: "As regards light from other quarters, such light cannot be disregarded; for, as was pointed out by Vice-Chancellor James in the Dyer's Co. *v.* King, the light from other quarters and the light the obstruction of which is complained of, may be so in excess of what is protected by law as to render the interference complained of non-actionable. I apprehend, however, that light to which a right has not been acquired by grant or prescription, and of which the plaintiff may be deprived at any time, ought not to be taken into account"; and they contended that in applying that principle in order to see whether there is a nuisance, all light except that passing through those portions of the new apertures which correspond with the old must be disregarded, and they alleged Taplin *v.* Jones (11 H.L. 179) to be a decision to the same effect.

Taplin *v.* Jones was distinguished by the Court as having no bearing, because, although the dominant tenement had been altered, before action brought, it had been made to conform to what it was before, and the claim was in respect of the old lights, and thus no question arose there as to what portion, if any, of the ancient lights survived the demolition of the old building, but the important point in the case under consideration lies in the interpretation placed upon the Court on Lord Lindley's dictum cited above. The Court said that the principle was understandable that when a room was lighted by ancient lights and non-ancient lights, the latter still being liable to obstruction, then it could not be said that as the light from these other windows was sufficient to prevent the obstruction being a nuisance there was no remedy, but it was otherwise if the plaintiff himself erected a new building totally different in every respect except for some slight coincidences in the old and new window spaces and then claimed relief on the ground that all the present light facilities should be treated as blocked out except the small portion of the ancient light retained, rendering that very inadequate light space more inadequate, for that contention would increase the burden laid upon the servient tenement (Ankerson *v.* Connelly, 1906, 2 Ch. 544). The Court then laid down the true rule, as follows:—"If the plaintiff pulls down the building with ancient light windows and erects a new building totally different in every respect, but having windows to some extent in the same position as the old windows, he cannot require the servient owners to do more than see that the ancient lights, if any, to which he is still entitled are not obstructed to the point of nuisance. He cannot require them not to obstruct non-ancient light merely because a portion of the window through which that non-ancient light enters his premises also admits a pencil of ancient light. If the obstruction of the pencil itself causes a nuisance the plaintiff is entitled to relief, but if, taking the building as it stands, the pencil obstruction causes no nuisance at all, the plaintiff is not entitled to relief." In the result the Court held no nuisance to have been proved.

The only case we know at all comparable with the above is Coutts *v.* Turner, a case unfortunately not reported in the Law Reports, but of which we published a report, August 10, 1928, and commented upon in our issue, November 2, 1928. There the plaintiffs in 1908 had rebuilt premises which to certain windows possessed ancient lights, and they had enlarged the apertures, but in some of the windows in the building as altered had incorporated the ancient lights. The case had the peculiar feature that the obstruction complained of was not another building, but a screen put up before the prescriptive period had run to prevent the plaintiffs from securing a right to the light to the new windows, and this screen had been erected only just in time to prevent the right from being acquired; therefore, unless this obstruction was held unjustified, the new lights would be secure for the future, and the Court, applying Lord Lindley's dictum, laid down the law as follows:—"I think it is now settled law that when the position is such as one encounters here—a room lighted in the main by windows in respect of which no prescriptive rights have been obtained—one is bound to take into account the whole of the light which is furnished to the room first by all the new windows, in so far as they are capable of becoming prescriptive rights. In that connection we have to remember here that the new lights in this particular room or office have existed subject only to such interference to them as has been brought about by the erection of this screen for a period which will secure them for the future." The method adopted by the Court in this case was to compare the amount of light taken away after blocking up the ancient lights, which is the converse of the method of the process contended for by the plaintiffs in the case we are considering, and applying this test the Court held that the plaintiffs would obtain a considerably larger amount of light than would be abstracted by complete obscuration of the old apertures. It was, however, the quasi-privileged position of the new lights that made this system possible.

In another case, not reported in the Law Reports, but reported in our columns, August 15, 1930, and commented upon in our issue September 26, 1930 (Sowler *v.* Moorgate Estate Co., Ltd.), where an old building had been pulled down and another erected in its place, a careful record had been made by the architect of the position of the old windows, and, this being the case, the Court found no difficulty in finding that the obstructive building so obscured the plaintiffs' windows, even as enlarged, as to render some of the rooms less well lighted than they would have been had the ancient lights alone been relied upon, and, as we pointed out in our note, although the evidence upon which this conclusion was based was not given in the report, the facts of the two cases seem widely different. In the *News of the World* case, the judge described the portion of the ancient lights as a comparatively "small peephole," and on the expert evidence came to the conclusion that the obstruction to the ancient light pencil alone would have had no appreciable effect on the new building as it stood, the difference being so small as to be negligible.

Workmen's Compensation: A Point of Practice.

We may draw attention to a point of practice under the Workmen's Compensation Act, 1925, which has recently been decided by a Divisional Court in the case, Fowkes *v.* Leicestershire Colliery and Pipe Co., Ltd. (1931, 2 K.B. 770). The point is this: Where execution is being applied for the original application is made to the registrar of the county court who, if he has no doubt about the order and no cause is shown against it, may make the order, but otherwise it is referred to the judge, who gives his decision, but, if his decision is questioned, there has been some doubt whether the further appeal is to a Divisional Court or to the Court of Appeal. The application for execution was made on a memorandum of agreement, in which it was stated that it was admitted that compensation was payable and that the average weekly earnings before the accident were £2 13s. 2d., and that the employers had been employing the workman as a motor driver at 8s. 5d. a day, raised to 8s. 9d., but the employers undertook to pay the workman during incapacity a weekly payment calculated in accordance with section 9 of the Act until such payment should be ended, diminished, increased or redeemed under the Act. The judge had remitted the matter to the registrar for the amount of compensation to be ascertained, but the employers were appealing from this order, alleging that the matter had come before him in his capacity of judge and not arbitrator, and the issue of what the man was able to earn could not be determined either by the judge as judge, nor by the registrar, but only by an "arbitrator." The Divisional Court held that the order of the judge remitting the matter to the registrar

was an order made under the Act, and under paragraph 4 of the First Schedule the appeal would only lie to the Court of Appeal.

The point is of importance to practitioners, because the author of that well-known text-book, "Willis's Workmen's Compensation," has expressed a contrary opinion in the twenty-seventh edition, at page 472, as follows:—"An appeal from a registrar granting leave to issue execution lies to the judge *qua* judge, and thence to the Divisional Court (Warren *v.* Roxburgh (1902, 106 L.T. 555; 5 W.C.C. 209)." The case here cited was referred to in the Divisional Court, but it was pointed out by the Court that the rule on which it was founded, rule 67 of the Workmen's Compensation Rules, had since been completely altered by rule 82, and the Court expressed the opinion that the framers of the new rule clearly intended that an order of the county court judge made on a matter of execution should be an order made within the Act, and thus the appeal lay to the Court of Appeal.

In Warren *v.* Roxburgh the memorandum provided for the payment of full compensation during total incapacity, the amount of any payment in respect of partial incapacity to be settled thereafter, and the appeal was taken to the Court of Appeal, and that court held that the appeal lay to the Divisional Court, and the basis of the decision was that neither the registrar nor the county court judge *qua* judge had jurisdiction to decide the question of incapacity which arose under the memorandum, as that could only be decided by him when sitting as arbitrator under the Act, but the Court intimated that if the memorandum had simply recorded an agreement to pay so much a week until further order the result might have been different.

The new rule, in sub-rule (5), shows how the difficulty here experienced has been got over and what the correct practice now is. The sub-rule is, "In particular if in the case of a weekly payment the party liable to execution alleges that incapacity has wholly or partly ceased, the judge may, on such terms as to payment into court or otherwise as may be just, adjourn the application for such time as he may think fit, to enable the party liable to execution to file a request for arbitration with respect to the review of the weekly payment. Any such adjournment shall be without prejudice to the right of the party applying for leave to issue execution to renew his application on good cause shown." This gets over the difficulty experienced in Warren *v.* Roxburgh, and it was the course adopted by the Court of Appeal in the two cases relating to execution which we noted in our issue September 25 last.

LAW REPORT

CHANCERY DIVISION.
Before MR. JUSTICE BENNETT.

ANCIENT LIGHT DISPUTE.
McGaw v. General Lying-in Hospital.

This was an action by Mr. E. S. J. McGaw, a wood moulding manufacturer, of York-road, Westminster Bridge-road, against the Governors of the General Lying-in Hospital, also in the York-road, for an injunction to restrain the defendants from building on their premises in York-road, so as to obstruct the ancient lights to the windows of plaintiff's factory.

Mr. Sword, K.C., for the plaintiff, explained that his client's premises were at the corner of Leake-street and York-road, and covered an area of about half an acre. His client's case was that the hospital authorities had acquired the site of some baths situate near his premises and the hospital, and were proposing to erect on it a new building. This building plaintiff alleged would, owing to its proximity and height, interfere with and obstruct light which was now obtained through ten windows facing south-west on the first floor of the moulding shop and a skylight extending along the whole of the south-west side of the moulding shop.

On behalf of the plaintiff, evidence was given by Mr. Perry John Waldram, Mr. Charles McMullin Brooks, chartered surveyor (of Messrs. Howell and Brooks), Mr. H. G. Butcher (of Messrs. H. Butcher and Co.) and Mr. E. Howard, chartered surveyor.

Sir H. Cunliffe, K.C., for the defendants, said his clients denied that any of the plaintiff's windows were ancient lights, and his instructions were that they had been boarded up for many years. The defendants' case was that their new hospital building, when erected, would not cause an obstruction either to the windows or the skylight of plaintiff's workrooms.

For the defence, Mr. A. S. E. Ackermann, B.Sc., A.M.I.C.E., and Mr. G. L. Vigers (of Messrs. Vigers and Co.), were called.

His lordship dismissed the action with costs. In giving judgment, his lordship said plaintiff failed as to his claim that the defendants would, if they erected their building, cause a nuisance by obstructing the access of light to the ten windows. But there still remained the question whether the defendants' proposed building would obstruct the access of light to the skylight. Though it seemed possible some light would be taken away, his lordship was by no means satisfied that the quantity would be substantial. That being so, he took the view that the plaintiff had failed to satisfy him that the erection of the defendants' building would render his moulding shop uncomfortable or that he would be unable to carry on his business as beneficially as before or that he would be really inconvenienced.

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

MR. NORMAN CULLEY, President, took the chair at a meeting of this Society held at the School of Art, Harrogate, on November 19, when Mr. Howard Robertson, S.A.D.G., F.R.I.B.A., gave a lecture, entitled "Problems of Modern Architecture," before a large gathering.

The styles of architecture, commenced the lecturer, were all modern in their day, all significant. Social changes helped transitions, but the greatest changes of form included the most far-reaching developments in structure. Then came the grand summary of the Renaissance, which employed all phases, followed by a reversal of the wheel of development through a period of revivals, until we returned to the pseudo-Greek. To-day another period was in the making, for which history would find the label. That phase of structure was still developing, starting with cast-iron and working through steel and concrete, but whither we were not sure. The all-metal building was on the horizon. One of these was now being built at Chicago, with walls, floors and partitions all of metal lined with insulating material. One of our structural problems had been the huge dead weight of walling, still in brick and stone, carried by the steel of large buildings. The tallest building in the world, the Empire State building, had to carry 14 tons deadweight for each of its 25,000 occupants. The average weight of a sq. ft. of wall on a skyscraper was 150 lb. The walls of the new metal building would only weigh 12 lb. to the sq. ft., and there would be a great increase in floor space.

One of the problems we had to face in the future was the treatment of roof-tops in large cities. In Radio City, a scheme sponsored by John D. Rockefeller, which had the largest office building in the world, the roofs were being laid out with gardens and trees, and would have a waterfall 90 ft. high. Many large modern buildings presented a fresh problem, because they had to serve the need of an advertisement as well as a shelter. But in all periods, buildings had served, in their way, as advertisements. Was not the Parthenon the sign of a cult, the Colosseum an advertisement for the popularity of Emperors, and Chartres Cathedral a symbol of religion? To-day we had buildings as advertisements for trade, transport and amusement. Our task was to advertise in comely fashion, and in that the client must be willing to co-operate. Compared with countries like Germany, Holland and France, England suffered from lack of co-ordinated architectural ideals. For the last hundred years or more it had been a case of each man for himself, as was witnessed by the architecture of nine-tenths of our streets. The great boon of the recent floodlighting of our big cities was the emphasising of our best buildings and the merciful blotting out of the rest. Darkness hid for a moment our architectural sins and gave glimpses of ideal cities. In domestic architecture and decoration change was on the horizon. The day might come, as already announced in German experiments, when interiors would be divided less into rectangular rooms and would consist of large spaces broken up by screens and curtains instead of doors, except to bedrooms and kitchens, one large area being planned to provide lounge space, with nooks for dining and reading.

The vote of thanks to the lecturer was proposed by Mr. T. E. Marshall, and seconded by Mr. B. R. Gribbon, supported by Messrs. G. H. Foggitt, J. C. Procter and others.

LONDON HAMPSHIRE SOCIETY.

A lecture illustrated by lantern slides was given by Mr. Arthur J. Mason, F.R.S.A., on Tuesday, November 17, at the R.I.B.A., on "Abbeys and Monasteries of Hampshire." The buildings included were Beaulieu and Romsey Abbeys, Christchurch Priory, and Winchester Cathedral. Considering the time at his disposal, the lecturer gave a thorough description of the many architectural details of these old buildings. It is such lectures as these that bring before the public the need for assisting to the utmost degree the preservation of the many ancient and historic buildings that exist in all parts of the country and the delightful settings in which many of them are placed.

The President of the Society, Sir Arthur Holbrook, K.B.E., proposed a hearty vote of thanks to the lecturer, and also to the Council of the R.I.B.A. for allowing the use of their premises. A vote of thanks was also given to Mr. Clifford Moon for operating the lantern. This was seconded by Mr. T. W. Ellis, M.I.E.E.

INSTITUTION OF CIVIL ENGINEERS.
Awards.

The Council of this Institution have awarded the Indian Premium for session 1930-31 to Mr. G. C. Minnitt, Assoc.M.Inst.C.E. (Bombay), for a paper read and discussed at an ordinary meeting of the Institution. They have also made the following awards for session 1930-31 in respect of "Selected Engineering Papers," published without discussion:—

A Telford Gold Medal to Mr. Herbert Addison, M.Sc., Assoc.M.Inst.C.E. (Giza, Egypt). Telford premiums to Messrs. H. A. Sieveking, M.Sc., Assoc.M.Inst.C.E. (London); William Blackadder, D.Sc., Assoc. M. Inst.C.E. (Aberdeen); R. F. Legget, M.Eng., Assoc.M.Inst.C.E. (Montreal, Canada); and jointly to Messrs. R. G. C. Batson, M.Inst.C.E., and H. R. Mills (Teddington);

and in respect of papers read at students' meetings in London or by students before meetings of local associations, during the same session:—

The James Forrest Medal and a Miller Prize to Mr. I. W. G. Freeman, B.Sc., Stud.Inst.C.E. (London); and Miller Prizes to Messrs. V. A. C. Durand, B.Sc., Stud.Inst.C.E. (Cardiff); F. C. Ball, B.Sc., Stud.Inst.C.E. (London); T. A. Burnside, B.Sc., Stud.Inst.C.E. (Glasgow); F. R. Paynter, Stud.Inst.C.E. (Newcastle-on-Tyne); D. H. McPherson, B.Sc., Stud. Inst.C.E. (Glasgow); S. G. Barrett, Stud. Inst.C.E. (Manchester); E. H. Ely, B.Sc., Stud.Inst.C.E. (London); H. E. Orr, Stud.Inst.C.E. (Yorkshire).

INSTITUTION OF STRUCTURAL ENGINEERS

PORTLAND CEMENT.

At a meeting of this Institution held on Thursday, November 12, a paper on "The Manufacture of Portland Cement" was given by Mr. Hal Gutteridge, A.M.I.Mech.E., M.I.E.I. Portland cement, he said, originated in England in 1824, and since that time this country had originated practically all the improvements in plant, the most important of which was the introduction of the rotary kiln by Ransome. The main essential elements in the raw materials used were lime, silica, and alumina. The raw materials were classified under two headings: (1) calcareous, in which the lime predominated; and (2) argillaceous, in which the silica and alumina were in the greater proportion.

Two processes were adopted in making Portland cement, namely, the "wet" process and the "dry" process. Both processes produced the same standard Portland cement, the difference being only in the treatment of the raw materials. In the wet processes, the raw materials, from the time when they left the quarry till they were introduced into the rotary kiln in the form of "slurry," were handled in a wet condition throughout. In the dry process, the raw materials were first put through the crusher, after which they had to be dried in special driers, then ground dry to a fine powder called "meal." This meal was sent forward to a number of silos in which control was exercised by exchanging their contents or by drawing out from a number simultaneously to obtain a correct and uniform chemical resultant composition. The meal was then sent forward and introduced into the kiln in this dry powder form.

In the United Kingdom all the cement plants were operating on the wet process, while in Canada, of the total twelve plants, seven used the dry process and five the wet process; but the wet process produced about one and one-quarter time the quantity of cement that the dry process plants produced. In the U.S.A., where practically all the early cement was produced by dry process, there had been a steady and gradual change to the wet process, until at the present time, out of about 156 plants, the number of plants using the wet process easily outnumbered those using the dry process.

From the mixers, whether it were slurry or meal, the material was fed into the kiln, where it underwent chemical and physical changes in the presence of heat, the resulting product being called "clinker." The clinker, with a small addition of gypsum to retard the setting time of the cement, was ground to a fine powder which was known as "Portland cement."

The type of kiln used in the manufacture of Portland cement was the rotary kiln. Where the wet process was being employed, the slurry could be introduced into the kiln in one of three ways—(1) by gravity, (2) by the filtered slurry method, and (3) by the spray feed method.

Where the dry process was employed, the meal was fed into the kiln by a water-cooled screw-conveyor. The clinker from the kiln was weighed in automatic recording weighers, and conveyed to storage, from where it was fed to the clinker grinding mills. At this point, two or three per cent. of gypsum was added to the clinker to retard the setting time of the cement when hydrated. Feed tables were arranged to proportion the amount of clinker and gypsum and to control the rate of feed of the mixed materials. The product from the grinding mills was the finished article, Portland cement. The cement from the grinding mills was conveyed and elevated to silos in which the cement was stored. It was usual to provide, in addition to the large silos, a number of small silos in which cement ordered for a particular contract could be stored separately. These silos had arrangements whereby they could be sealed up, and cement only extracted under the control of the purchasers.

At every stage of the preparation of the raw materials successive and progressive correction was exercised over the composition, such that all variations were eliminated and the resultant final mix was of constant composition. The uniform fineness of the prepared raw materials after grinding had an important bearing on the quality of the cement, and this was the subject of close observation and frequent testing. Samples were taken usually every hour, and tested to show the proportion of the material which still remained as residue on various standard sieves. The physical tests for fineness of the cement were of prime importance, for the finer the particles the greater their adhesive and cementitious quality, the more sand they would carry for a mortar of given strength, and the shorter their hardening time.

World Cement Production.—In 1929 the total capacity of all cement plants in the United Kingdom was 6.75 million tons, with a production of 4.7 million tons, compared with the capacity of the United States plants of 43 million tons and a production of 28 million tons. Canada, during the same year, had a capacity of 2.5 million tons and produced 2 million tons.

Belgium exported the greatest quantity of cement of any country, amounting to 1.6 million tons, which was 58.3 per cent. of its total production, as compared with Germany with 1 million tons. Then, in descending order, came the United Kingdom (20 per cent. of total production), France, Denmark, the U.S.A., Canada, Sweden, and Italy.

The U.S.A. imported the greatest quantity of cement of all countries, the United Kingdom being next. All countries had an excess of exports over imports of cement except the U.S.A., where there was an adverse balance of about a quarter of a million tons.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

The New Session.

The new session was opened on November 10.

During the debate on the Address, in reply to the King's Speech, MR. MCENTEE, a Labour member connected with the building trade, contended that by building on a large scale, by mass production and standardisation, prices could be reduced to 15 per cent. There were many thousands of men in the building industry out of work, and there was no earthly reason why they should not be employed except the lack of organisation in the industry itself. He asked the Government to go particularly into the question of housing and to see if it were not possible to introduce mass production and standardisation, and to reduce costs. By organisation they could get reductions in price that would mean the employment of 200,000 men, and it could be done within a year.

Anti-Dumping Bill.

The Royal Assent has been given to the Abnormal Importations (Customs Duties) Bill, which empowers the Board of Trade to stop dumping by imposing duties by order up to 100 per cent. of their value on articles of any class or description comprised in Class III. of the Customs and Excise Import and Export List if the Board are satisfied that such articles are being imported into the United Kingdom in abnormal quantities.

The articles specified in Class III. are as follows:—Coke and manufactured fuel; pottery, glass, abrasives, etc.; iron and steel and manufactures thereof; non-ferrous metals and manufactures thereof; cutlery, hardware, implements and instruments; electrical goods and apparatus; machinery; manufactures of wood and timber; cotton yarns and manufactures; woollen and worsted yarns and manufactures; silk and silk manufactures; manufactures of other textile materials; apparel; chemicals, dyes, drugs and colours; oils, fats and resins, manufactured; leather and manufactures thereof; paper and cardboard; vehicles (including locomotives, ships and aircraft); rubber manufactures; miscellaneous articles wholly or mainly manufactured.

The value of Class III. imports during the past three years has been as follows:—

	1929.	1930.	1931.
	£	£	£
Oct. ...	30,173,095	27,715,299	27,248,715
10 months	278,442,312	262,101,371	215,099,350

Special figures compiled by the Board of Trade show that in the ten days following the period included in the returns for October of this year the value of the imports under Class III. was £14,158,373.

During the discussions on the measure, SIR HENRY PAGE CROFT gave examples of imported articles which we were competent to manufacture in this country. He mentioned bricks, and said that in the first eight months of 1924 we imported 4,000,000 bricks. In the first eight months of 1931 we imported 137,000,000 bricks. That was an increase of 3,300 per cent.—a very serious thing for the workers of the country.

The President of the Board of Trade (Mr. Runciman) pointed out that the measure was a temporary one, pending the production by the Government of a larger scheme. The Board of Trade would use their powers at once to deal with those cases in which there was no doubt, and would deal with the doubtful ones later. The acceleration of dumping in recent weeks had been continuous.

Rent Restrictions.

MAJOR ATTLEE asked the Prime Minister whether, in view of the growing importance of the rent question, he would, in making arrangements for the remaining business to be taken before the adjournment of the House, provide time for a discussion of the report of the Rent Committee.

MR. MACDONALD replied that the future of the Rent Restrictions Acts and any amendments of the Acts would be considered by the Government in the light of the Report of the Departmental Committee which was recently issued. In the meantime it was proposed to prolong the operation of the present Acts by means of the Expiring Laws Continuance Bill, and in the circumstances he did not think that any useful purpose would be served by a discussion before the adjournment.

Manchester Housing.

SIR J. NALL asked the Minister of Health if he would state what was the present position regarding the housing schemes of the Corporation of Manchester, and whether his department would continue to require the city council to build only the types of houses for which the greatest demand existed.

SIR E. HILTON YOUNG said that the Corporation of Manchester had recently submitted proposals for the building of over 2,000 houses, many of which were of a larger size than he thought was required. The Corporation had been asked to revise their proposals so that the bulk of the houses to be provided could be let at a lower rent than had been usual in the city for Corporation houses, and he was in communication with them on the subject.

SIR J. NALL then asked the Minister whether he was aware of the proposals of the Corporation of Manchester to demolish

a large area of property in the district of Hulme without any provision for alternative accommodation in the immediate vicinity; that previous schemes had resulted in only 25 per cent. of the dispossessed population moving to new housing estates, whilst 75 per cent. had remained in overcrowded conditions in the vicinity of the demolition area; and would he review existing legislation on this matter at an early date.

Sir E. Hilton Young said he understood that the question of rehousing accommodation to be provided by the Corporation of Manchester in connection with the proposed clearance referred to was still under consideration by the Corporation. As regarded the only other area which had been cleared by the Corporation since the War, his information was that 75 per cent. of the persons displaced were, in fact, rehoused by the Corporation. He did not think that any amendment of existing legislation on this matter was required.

Local Authorities' Advances.

Major Milner asked for the number of local authorities which had suspended all advances under the Small Dwellings Acquisition Acts.

Sir E. Hilton Young said he was only aware of two decisions of this kind by local authorities. His sanction was not required.

Housing Schemes Curtailed.

Major Milner asked the Minister of Health if he would state the number of housing schemes which had been suspended or retarded following the suggestions to local authorities that all expenditure should be reduced to a minimum; and if he could state the number of persons who would have been employed had the various housing schemes been continued.

Sir E. Hilton Young said he had only been informed of nine cases, covering quite a small number of houses, in which any definite action had been taken by the local authority to curtail or suspend their housing programme. The hon. member would see from a copy of a circular which he was sending to him that he was under a misapprehension in stating that it had been suggested to local authorities that all expenditure should be reduced to a minimum irrespective of its character or purpose.

Imported Furniture.

Sir B. Peto asked the President of the Board of Trade whether his attention had been called to the fact that during the past three years imports of furniture had averaged nearly £1,000,000, or nearly double the value of the imports for the years 1920-24, and that unemployment in the furniture trade now stood at 18.7 per cent., and whether he proposed to take any steps to check this particular class of imports.

Mr. Colville, who replied, said that the facts concerning this trade would be reviewed in relation to the powers for which the Government was now asking Parliament.

Town and Country Planning Bill.

Asked whether it was proposed to reintroduce the Town and Country Planning Bill, Sir E. Hilton Young, Minister of Health, said that careful consideration would be given to this matter with a view to an early decision as soon as circumstances permitted.

Houses Built.

Sir E. Hilton Young informed Lt.-Col. Fremantle that the number of houses built in England and Wales by local authorities from 1919 to September 30, 1931, was 618,547. Complete particulars of the houses built by private enterprise during the same period were not yet available, but the number was approximately 1,135,100, exclusive of houses having a rateable value exceeding £78 (or £105 in the Metropolitan area). Houses erected by local authorities in replacement of houses demolished under improvement schemes made prior to the Act of 1930, were not included in these figures.

THE TOWN PLANNING INSTITUTE

PRESIDENTIAL ADDRESS.

At the first meeting of the session, held last Friday, at Caxton Hall, S.W., Dr. R. C. Maxwell delivered his presidential address, his subject being "The Town and Country Planning Bill—The Outlook."

The President said it was always a difficult matter for the president for the time being of the Institute to choose an appropriate subject for his address, but after considerable doubt he decided that the most useful subject to take in existing circumstances would be the Town and Country Planning Bill of last Parliamentary session. It could not be doubted that the need for town planning powers over built-up areas was widespread and urgent; and as a result of long and persistent propaganda work by the pioneers and advocates of town planning public opinion had now been thoroughly awakened and definitely favoured the granting of these powers. A strong demand had also grown up for extending planning powers to rural areas. The demand had arisen largely from developments since the War, because, in particular, of the far readier means of transport, which had made rural districts much more accessible, and which also, unfortunately, had led to the scattering of bungalows and bungaloids indiscriminately over the countryside. The effect had been seriously to spoil on an extensive scale the beauty and amenities of many a rural area and picturesque landscape by ribbon and sporadic development, which, moreover, apart from its unsightliness, had brought in its wake serious local government problems, costly to solve.

The Town and Country Planning Bill was introduced in the House of Commons by the then Minister of Health, Mr. Arthur Greenwood, on March 22 last. The Bill was considered at 21 meetings of the Standing Committee to which it was referred, and had reached Report stage when the House adjourned in August. It made no further progress before the dissolution. The President then gave a résumé of the principal provisions of the Bill, and in commenting on them said that Clauses 15 and 16, relating to General Development Orders, were in some ways the most important. The effect of these, coupled with Clause 12, would be to enable a planning scheme to preserve the countryside by keeping free from building operations land which it was desirable to retain in its rural state, or in cases where essential public services could only be provided by excessive expenditure of public money. Land thus reserved from building must be reviewed every three years by the authority, but the development of such land might be allowed at any time under a general development order made by the authority, or on appeal, by the Minister of Health. In considering applications to build on such land the authority must take into account any injury likely to be caused to the applicant, as well as any public advantage likely to result from the maintenance of the prohibition or restriction. Before refusing an application, the authority must also be satisfied that other land suitable for building was available on reasonable terms and, either that the operations would involve danger or injury to health by reason of lack of roads, sewers, water supply or other public services and that the provision of the necessary services would be premature, or likely to involve excessive expenditure of public money; or that the operations would be likely to injure the amenity of the locality. The Clauses relating to Compensation and Betterment—Nos. 18 to 22—re-enacted existing provisions with considerable improvements. Clause 28 of the Bill would enable public departments, subject to Treasury approval, to enter into agreements for securing that any land which was under their control or was vested in them, should be laid out and used in conformity with the general objects of the scheme. This should go a long way to obviate the disadvantage of gaps in otherwise comprehensive schemes caused by the presence of lands under the control of or belonging to government departments.

The Finance Act of the present year had created a new and general liability to land tax; but one of the most essential classes of exemption, which the Government, through the Solicitor-General, on June 10, 1931, promised to provide for, by Clause 29 of the Bill, was not in operation owing to the Bill not having become law. That clause would authorise local authorities and joint committees empowered to prepare schemes to enter into agreements with landowners provided that their land or any part of it should be made subject to conditions restricting its planning development or use. The Finance Act, by Section 11 (1) (*d*) and the First Schedule, 1 (*g*), enacted that such agreements were to be taken into account in assessing the value of the land for tax. Thus an owner, prepared to maintain his land free from building development for a number of years, could, by agreement with the local authority, escape taxation in so far as the prospect of building was removed or reduced by the agreement. It was very important either that this Clause 29 should be enacted as soon as possible, or that some modification should be made in the Finance Act to meet the situation.

The chief organisations interested in planning, rural preservation and good housing development were agreed that a tax on realised increment would be much more adapted to modern conditions and less likely to discourage the preservation of open spaces, or to intensify development upon land for the purpose of recovering amounts paid in undeveloped land tax. When land was reserved from building use, whether for public enjoyment or merely to remain open in private enjoyment, that must cancel any expectation of increment value on account of the prospect of building use. The effect of the reservation was to transfer the prospect of realising that value from the lands reserved to other lands. It would be a fair arrangement that the compensation to those who lost the prospect of realising increment should be obtained from the increment realised on those lands to which the prospect was transferred. At present the public were put to heavy expense in paying compensation for this prospect on all lands acquired for open spaces. The sums thus paid for prospective increment were realised a second time by other owners to whose lands the building was transferred. It was proving impossible for planning authorities to bear the expense of reserving land urgently needed as an open space on these terms.

To meet the difficulty it was suggested that the form of tax to be imposed under the Finance Act of 1931 should be modified by the substitution therefor of a levy on realised increment, and that a substantial proportion of the levy should be allocated locally to form a fund from which owners whose lands were reserved from building use might receive reasonable compensation. This modification, it was believed, would go far to meet the views of landowners and their advisers, and would do much to harmonise this form of taxation with the aims of town and country planning.

In connection with the question of open spaces, he would like to refer to an interesting proposal for the amendment of the Bill, made by Sir Edgar Bonham Carter. The principle of betterment had now been on the Statute-book since 1909 or earlier, but local authorities had in most cases found it illusory, and had rarely been able to recover substantial compensation by means of it. It was a difficult matter to decide at the time an improvement (other than a new road) was effected what lands were increased in value by the improvement. It was still more difficult to decide at that time the amount of the increase. Both matters being doubtful, a valuer or arbitrator rightly gave the benefit of the doubt to the person from whom betterment was claimed. But, further, the provi-

sion that the person who was charged with betterment must pay it at once, before he had realised any pecuniary benefit from it, and even though he might be without the money to do so, was harsh and likely to weigh the judgment of a valuer or arbitrator in his favour. Hence it was improbable that local authorities would find betterment under the Bill a substantially more fruitful source of compensation than it had been under the existing law.

No landowner should be allowed so to develop his land as to produce unhealthy conditions. In pursuance of this principle the legislature had by successive stages restricted the right of landowners to cover the whole of their land with buildings. They were no longer permitted to build back-to-back houses. They must provide a certain amount of open space at the back of dwelling-houses. And by a town-planning scheme the number of houses a landowner might build to an acre would be limited. Following out this principle, it would be reasonable to require landowners who developed their land to do so in such a way as to render possible the eventual provision of adequate open spaces to meet the needs of the future residents. If a scheme reserved land as a public or private open space or restricted it from being built over, the effect was not to destroy building value, but to transfer it to other land. It was therefore suggested that the Bill be amended so as to require the owner of any land exceeding a stated area, say 10 acres, included in a scheme and planned for building, to reserve as a private open space (or as agricultural land and woodland) land equivalent in area to a prescribed proportion, say 1-5th, of the land planned for building. It should be a condition that the private open space and its situation was subject to the reasonable approval of the responsible authority, who before granting their approval would satisfy themselves that it was suitable to be converted eventually into a public open space.

It was further suggested that in certain other cases an owner, instead of being required to reserve part of his land as a private open space, should be required to pay to a special fund for providing open spaces the value of the benefit which accrued to him in consequence of the prescribed proportion of his land not being reserved as a private open space, such payment, however, not to become payable until the land, in respect of which such payment was due, was developed. The cases in which such payment should be required would be:

(1) those where the responsible authority for good reason refused to accept a private open space proposed by an owner as satisfying his obligation to reserve part of his land as a private open space; and

(2) those where land less than the stated area (of 10 acres), which was not planned for building and was acquired by its owner after a date to be fixed in the Bill, was subsequently planned for building.

These proposals, it was suggested, would prove more effective than those contained in the Bill. They would safeguard the health of towns by requiring landowners to reserve adequate areas for open spaces. They would go far to facilitate the provision of adequate public open spaces. While they to some extent restricted the existing rights of landowners, such restrictions did not go further than was necessary to protect the public health.

As to the future—all bodies and persons interested in town and country planning, whether from the point of view of the preservation of the amenities of the countryside, or the orderly and economic development or redevelopment of urban areas, recognised that it was a matter of the first importance that the Town and Country Planning Bill should be placed on the statute book, and that, too, at an early date. Action by builders and land developers was in progress in all directions, and damage was being done which it would be impossible to repair or make good. At the same time it was fully recognised that much useful work could be done and was being done by many authorities under existing powers; and no expectation of increased powers should be allowed to stop the work now in hand or damp the energy or enthusiasm of those who were now carrying on planning work.

It was fully recognised that the Government now in office had a national task of supreme and overriding importance to perform, and that nothing must be allowed to interfere with the performance of that task. But probably much of the work involved would be carried on outside the immediate purview of the legislature. This being so, and having regard to the interesting aspect and composition of the opposition benches in the House of Commons, a considerable amount of Parliamentary time should be available for other business. There seemed no reason therefore why the Town and Country Planning Bill should not be reintroduced at an early date. Representations to this effect had already been made to the Prime Minister and also to the Minister of Health. Town planning had at least two strong advocates now in the Cabinet—Mr. Neville Chamberlain, the Chancellor of the Exchequer, and Sir Hilton Young, the new Minister of Health, and it might be hoped that the whole of the Cabinet would favour the early reintroduction of the measure. But the Government, or rather its individual members, were human. They derived their strength from the people, and to ensure legislation on this or any other subject they must have the support, he might say the "drive," of public opinion. It behoved them therefore as an Institute and the other organisations interested in town planning to use all and every means at their command to secure that the Bill should again come before Parliament, and that this time the measure should be passed through all its stages, in both Houses, to a triumphant issue.

Dr. Gibbon (Town Planning Department, Ministry of Health), in proposing a vote of thanks to the President, said he had heard it said that the Town and Country Planning Bill, as it finally emerged, was too favourable to the interests of the landowners. Well, a real effort was made to secure that the Bill should be fair, and he urged on town planners that however anxious they might be to secure the best possible plans, they must be scrupulously fair to all interests and try to carry other interests with them. With regard to the subject in its larger aspect, some of them who were inclined to try and survey the world were a little dispirited at what was happening at the present time. Whether they looked at their own job of planning or at the bigger life outside, it could not be gainsaid that man was in danger of becoming the victim of his own contrivances and a slave to his inventions. The real question was not whether they should plan, but whether, both in the layman and the expert, they could generate sufficient courage and develop sufficient ability to reach up to the stature of their problems. In town planning the pioneer work had been done, and the problem now was to make it more exact and make it depend a little less on individual preference and opinion, and more on the conclusions derived from ascertained facts.

Sir Leslie Scott, K.C., seconding the motion, said the mind of the whole country and of the Government was concentrated on the task of restoring the nation's prosperity. The Town and Country Planning Bill was a measure which would bring, directly and indirectly, definite, substantial, and, in some ways, even powerful, aid in the economic task. The striking fact about good planning was its far-reaching character, and the great number of different directions in which it tended to bring about a conservation and an improvement of property value to the benefit of all owners of property, and to reduce the expenditure of local authorities, and, therefore, the burden of rates. Over and above such direct economic advantages was the national benefit which none could measure but all could recognise. It seemed to him that at the present, of all times, this matter of planning should be taken in hand, and he emphatically supported the appeal for the reintroduction of the Town and Country Planning Bill. They could at no time afford the wastefulness of haphazard, unplanned development; but such development to-day was a wicked waste of national wealth. Now was the time to lay down lines for future development, so as to secure that all money spent on the erection of buildings and the carrying out of public works would be fully productive. In the absence of a policy and a plan so much of the money was wasted.

Dr. McLean, M.P., said when they got a measure of prosperity there would be general development, and for that development they must plan. They ought to make it quite clear that town planning was a technical and economic matter. There was a feeling about that town planning and Socialism were synonymous and that the Bill was a Socialist measure. He dissented from that, for it could be applied under any political system. He might have a chance of speaking on the Bill in the House, and he would make it quite clear that it had nothing whatever to do with any of the "isms."

The resolution was carried.

INCORPORATED CHURCH BUILDING SOCIETY

At a meeting of this Society, held at 7, Queen Anne's-gate, Westminster, recently (Sir Cecil Harcourt-Smith, C.V.O., LL.D., in the chair), grants were made towards building new churches at: Addiscombe, St. Mildred, £250; Morris Green, St. Bede, £200.

Towards reseating or repairing the churches at: Aldingham, St. Cuthbert, £25; Allendale, St. Peter, £20; Balderton, St. Giles, £25; Beddingham, St. Andrew, £30; Bradley, St. John-the-Baptist, £15; Brailes, St. George, £30; Cossington, St. Mary-the-Virgin, £25; Ditchingham, St. Mary, £25; East Ham, St. Mary Magdalene, £75; Kessingland, St. Edmund, £20; Liverpool, St. James-the-Less, £10; Lydford, West, St. Peter, £20; Menheniot, St. Antonius, £25; Shedfield, St. John-the-Baptist, £20.

Grants were also made from the Mission Buildings Fund towards building churches at: Bedminster, St. Hugh, £75; Neyland, St. Clement, £150; Hollingwood (Chesterfield), St. Francis, £75.

Several grants were also paid for works completed.

In addition to the above, the sum of £1,493 was paid towards repairs to 42 churches from trust funds held by the Society. With this meeting the committee has granted over £6,000 this year towards church extension and repair in England and Wales. The Society, being dependent upon voluntary contributions, urgently needs more generous support from churchpeople to enable it to continue and extend its work. Every penny subscribed is given away annually in grants.

Ealing Arts Club Exhibition.

On Saturday Mr. Terrick Williams, A.R.A., opened a seven days' exhibition of work by members of the Ealing Arts Club to celebrate its coming of age. The exhibits include oil and water-colour paintings, and specimens of arts and crafts. On exhibition also is a design by Mr. J. E. Watts, who received at the hands of Mr. William R. Davidge, F.R.I.B.A., the adjudicator, the diploma for a design for the layout of Haven Green, an open space near Ealing Broadway Station.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?

We do not undertake to reply to inquiries concerning proprietary materials.—ED.

QUESTIONS.

Question of Contract.

SIR,—We should be pleased if you could give us the following information; the writer has studied "Creswell," but cannot quite see the matter clear. We are just nearing the completion of a contract for £23,000, which was obtained in the ordinary way in competition on supplied bills of quantities. The architect and the clerk of works are now taking the quantities and measuring every item in rotation, and making the addition or deduction accordingly. Are they in order in doing this? To us it appears that the quantities should be taken as priced, with any deviation (add or deduct) specially ordered, not measuring completely every item, otherwise the job ceases to be a contract, but just a measured job on schedule prices. If they are within their rights to measure the whole job, can we claim any extra for our cost in measuring, which virtually means taking off new quantities? NORTHANTS.

Soundproofing Floor.

SIR,—I have to convert a house into two flats. The first floor is 1-in. boards on open beams, and it is desired to leave the beams uncovered. The problem is to make the floor soundproof, not by non-conduction of sound but by deadening sound by a soft surface, e.g., rubber. What is the best treatment?

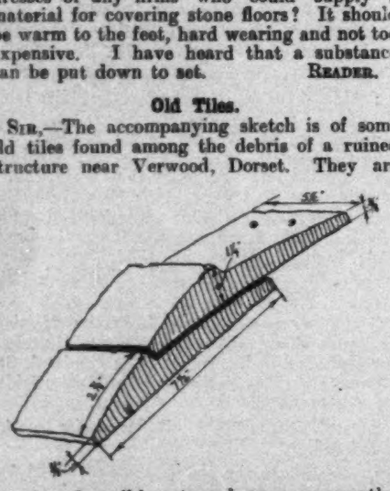
J. S. R.

Covering for Stone Floors.

SIR,—Could you give me the names and addresses of any firms who could supply a material for covering stone floors? It should be warm to the feet, hard wearing and not too expensive. I have heard that a substance can be put down to set. READER.

Old Tiles.

SIR,—The accompanying sketch is of some old tiles found among the debris of a ruined structure near Verwood, Dorset. They are



sound and well-burnt and were apparently, when new, of a bright, light red colour. Not having seen any like them, I shall be glad if you or any of your readers could inform me as to their name and origin, with, if possible, their approximate date.

BOURNEMOUTH ARCHITECT.

Temporary Structure Question.

SIR,—I have been asked to deal with the case of a temporary structure erected nearly five years ago and used from the beginning for residential purposes. No plans appear to have been passed by, or submitted to, the urban district council. The then owner has now gone, and the present owner is being pressed by the council surveyor to sign a "temporary structure" agreement, which includes a clause for termination and removal of the structure on receipt of two months' notice from the council. The structure complies at present with the by-laws. I believe that a similar case came before the courts a year or two back, and it was held that as the council had not dealt with the temporary building as such within a reasonable time after its erection, they had lost their power to object to its continuance. I am unable to trace the reference at the moment, but should be obliged if you could confirm by recollection of the point.

CHARTERED SURVEYOR.

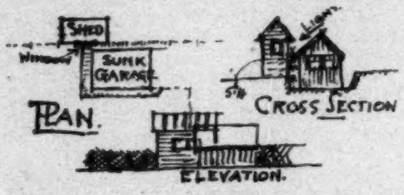
"Ceilings" in Specification Clause.

SIR,—In a house we are building there is a large store in the basement under the kitchen. The floor of the kitchen is of tiles laid on a suspended floor of reinforced concrete 8 in. thick, which forms the roof of the basement store. The specification reads: "Cover all ceilings with —— (a proprietary ceiling board) or other approved." The architect has informed us that we shall have to fix the board to the underside of the roof of the basement store, as he contends it is covered by the words, "all ceilings." Should we be justified in asking for an extra order for doing this work, or is it part of the contract, which is a lump sum one?

COUNTRY.

Right of Light.

SIR,—My neighbour has a shed abutting on the post and wire fence between our gardens, the fence being his. In the shed is a long and narrow window, with sliding sashes, 4 ft. 6 in. by 1 ft. 3 in. deep, and the sill is 5 ft. 4 in. above ground. The shed is



about 30 ft. back from backs of houses, in a garden about 100 ft. long. The window overlooks my garden, and is nearly clear of the back of my garage, which is 2 ft. away from fence. The shed has been up for three or four years. Is he acquiring a right of light over my garden, and, if so, what steps can I take to stop it? CROWN GLASS.

Wood Water-closet Seats.

SIR,—I should be glad if you would give me the names and addresses of British manufacturers of wooden water-closet seats.

SECRETARY.

[The names of any such manufacturers as write to the Editor will be forwarded to our correspondent.]

ANSWERS.

Maintenance Question.

[ANSWERS TO "STUDENT," NOVEMBER 20.]

SIR,—The maintenance period usually commences to run from the date of practical completion of the contract works; but the contractor cannot be called upon to make good defects due to "wear and tear" during that period unless there is a stipulation to that effect, or the "wear and tear" results from defects for which he is liable. If it can be shown that the tiles were blown off the roof because they had not been properly fixed at the outset, the contractor is undoubtedly responsible for their replacement. (See Chap. VIII., "Creswell on Building Contracts.") LEX.

SIR,—The question rests upon how the tiles were fixed and whether the tiles were of quality selected. If the tiles have been nailed as specified and of quality chosen the builder would appear to be right in his contention. FAIRPLAY.

Dilapidations.

[ANSWER TO "READERS," NOVEMBER 20.]

SIR,—The point is frequently one around which disputes centre. Strictly speaking, the structure of a house consists of those portions which protect the interior from the weather (other than glass), and which support the building against collapse. Under such circumstances, floor boards themselves would not rank as structure, though they could become damaged by structural defects, such as the collapse of supports, or the spread of dry rot from faulty structure. Excessive wear to the surface of floor boards, however, would be a repair chargeable to the lessee. The editorial note suggesting consultation with a solicitor is wise advice, however.

VALUES.

Preparing Elm for Exhibition.

[ANSWERS TO "P. A. W.," NOVEMBER 20.]

SIR,—The method suggested is probably the most lasting process, but a waxed surface, frequently renewed, would give an even better effect. POLISH.

SIR,—*Do not use size*, as it will form a film through which the varnish, as a preservative, cannot penetrate. Apply first with a coat of one part each of a good quality copal varnish and genuine turpentine, follow with a coat of three parts varnish and one of turpentine, and finish with a coat of varnish. Let as much time pass as possible between each coat, so that the finish will bear out well. In the course of time the elm will assume a rich umber hue, which the coating of size would prevent. This method was employed on the Heriot Watt College at Edinburgh. JOHN M. FIFE.

Current Prices.

[ANSWER TO "ESTIMATOR." OCTOBER 23.]

SIR,—The prices given in *The Builder* for the London area are found to apply fairly closely to districts as described by your correspondent, so far as constructional steelwork is concerned, as extra rail charges and less complete hoisting plant about cancel out differences in wage charges. ESTIMATOR.

Lithography.

[ANSWER TO "CHARGES," NOVEMBER 6.]

SIR,—The printing of plans supersedes the old-fashioned method of tracing by junior assistants when salaries were not a charge on the client. These charges are not, therefore, legitimate charges under out-of-pocket expenses. FAIR.

Heating Question

[ANSWER TO "QUERIST," NOVEMBER 6.]

SIR,—Where the situation is suitable it is often possible to carry up a small ¾ in. pipe from the air vent of the radiator to a point above the water level of the system. This small pipe can be buried in the plaster, and provides a permanent escape for air without further adjustment. HEATER.

By-Laws.

[ANSWER TO "COUNTRY PRACTICE," NOVEMBER 6.]

SIR,—A local authority is bound to state under what by-law disapproval has been ruled, but not bound to explain in detail in what way that by-law has been infringed.

COUNTRY PRACTICE.

Electricity Charges.

[ANSWER TO "RATEPAYER," NOVEMBER 13.]

SIR,—In general a local public utility company is entitled to charge for electricity to the full extent of the limit fixed by its special Act or Order, and under which it obtains its powers. Representations might well be made to the Central Electricity Board on the question asked, and methods of charging are dealt with in Section 42 of the Electricity (Supply) Act, 1926. LEX.

Schedule of Prices.

[ANSWER TO "SCHEDULE," NOVEMBER 13.]

SIR,—Is "Schedule" correct in asserting that a contractor cannot make a percentage reduction on p.c. items if he so desires? Surely it is for the contractor to decide whether he wishes to cut his profit, or even lose money, on any item. Under the 1931 R.I.B.A. Form of Contract a builder is definitely assured of receiving either a 5 per cent. or a 2½ per cent. discount. If he desires to reduce his profit on these items, what is there to prevent him from doing so? I should be interested to know what the legal position is on this matter. DUBIOUS.

THE BUILDING TRADE

ESTIMATING: SOME HINTS AND DATA.—XXII

By J. R. TAYLOR.

SUB-STRUCTURAL COSTS.

From many points of view, the problem presented by what is now sufficiently well understood if referred to as "Council Housing" is one of the most interesting as well as the most difficult that confronts architects and builders, and therefore estimators, at the present time. And when it is remembered that not until we have abolished the slum, not only the city slum, but the small town slum and even the village slum, shall we have solved it, we may say that it is a problem that will engage our attention for a great many years. The problem is not merely one of building a sufficient number of houses, but of so building them that in course of time all our efforts shall not merely result in the creation of new slums, thus intensifying the troubles of those who come after us. Some there are who believe that the solution lies in building with less permanent materials so that we shall build oftener, while others say that we should build with material of much better quality and with much more regard to good workmanship. Still others were until recently, and in some cases still are, quite satisfied with the houses as they have been and are being built, but complain that for want of better organisation they are costing too much. Comparatively few recognise that we are, in fact, facing old problems that had been to some extent shelved by circumstance. But to those who thought that we had found an acceptable solution, the note that appeared recently in *The Builder* (November 6, page 733) must have come as an unpleasant surprise. We read that the Ministry of Health is alarmed at the cost of maintenance on municipal housing estates. That some such result was to be expected I have said before (see *The Builder*, December 27, 1929, page 1120; and December 12, 1930, page 1014).

The amount that may be set aside for maintenance and repairs under the Addison Act is 15 per cent. of the rent, and on two estates the net cost of repairs is said to exceed 20 per cent. of the rents. Had these two cases stood alone the Ministry would probably not have expressed alarm, but annoyance. That so soon after erection 15 per cent. of the rent should prove to be an inadequate allowance for repairs is indeed alarming, because in the early stages a reserve should be built up to meet the heavy cost of renewals that are bound to be necessary long before the expiration of the loan period.

It is, however, necessary to look at these figures a little more closely before the position is properly appreciated. In some rural areas where the new houses required were comparatively few, and they could be built so as to be served by existing roads, the cost of the non-parlour type, which in future comparisons will be called four-roomed, has been low enough to allow of the rents being fixed at 6s. per week. In other districts, where conditions have not been so favourable, the costs have been such as to require a rental of 8s. or even more for similar accommodation; and for parlour type or five-roomed houses as much as 15s. per week is required in some cases.

It will be seen, therefore, that repair figures based on percentages of rents are not altogether satisfactory as a basis of comparison, because like is not compared to like. For instance:—Assume one hundred houses to be let at 6s. each per week per house of four rooms; the yearly income will be £1,560, and 15 per cent. of that would be £234, representing an authorised maintenance bill of just over 11s. 8d. per room per annum. Whereas a hundred houses of five rooms each at a rental of 15s. per house per week would yield £3,900, and the comparable authorised maintenance bill would be nearly 21s. 10d. per room.

Some of the differences in first cost are due to design, but the most important factor is site. If the site demands an expensive substructure, the total cost of building is necessarily higher. This is a point of importance to the estimator, because his records will sometimes tell him all he wants to know about cost of superstructure for houses of the same type, and all he need do is to make the necessary allowances for differences in cost of foundations.

But before going on to deal with substructural costs, and to make some suggestions in regard to the design, I think it desirable to devote some space to the examination of the problem as a whole. I take it that even those who would prefer to build cheaply and often would, unless they seek a solution in huge flats or hotels, be content if once in every generation we pulled down only the superstructure, provided that the substructure remained thoroughly sound. There would be something to be said for that view, though it is not my own. But to go on building in a more permanent manner at a cost that requires to be spread over forty years on substructures that cannot be relied upon seems to me to be a very short-sighted policy, and one that is going to add considerably to our already heavy troubles in the near future.

A point that appears to have been overlooked is that for a publicly owned building a higher standard of maintained repair is desirable, and probably more necessary than in the average case of privately owned buildings of the same class. This seems to me to indicate that renewals will also be more frequently made; and though the renewal of a kitchen range may be a little outside the scope of an article principally concerned with substructure, it has a bearing on the general proposition. The renewal of wooden floors, made necessary by reason of admitted damp through faultily designed substructure is, however, very much to the point. And this brings us to the heart of the matter.

The speculative builder, who provided most of the houses of the pre-war period, was but little concerned with their condition after, say, twenty years. If he thought about it at all, he felt sure that in that time they would probably have changed hands more than once, or might even be pulled down to make way for shop property. He knew that if they survived for forty years the bulk of them would probably be more or less derelict, but that was no particular concern of his, and he built just as well as the by-laws compelled him to do, and just as badly as they permitted. His problem was not ours.

Not as a rule compelled to develop on town-planning or garden-village lines, he built along those of least resistance in long, unbroken rows, as close up to the street as possible. Where his houses extended from cross-street to cross-street, were fronted on or very close to the paved footwalk, and had a paved space at the rear in compliance with the by-law, his foundations enjoyed a considerable degree of shelter as compared with those we are considering. In blocks of ten, twenty or upwards, the proportion of external walling open to attack by wind-driven rain was small, and the proximity of other streets afforded shelter. But, despite this positional advantage, as is well known to all builders who carry out repair work, a high percentage of these houses suffer from unequal settlement, and slipped arches, fractured sills and cracked walls are nearly everywhere in evidence, and particularly so where the houses are built on clay subsoils.

When consideration is given only to houses built in the period 1894-1914, it will be found that the greater number of this class have their ground floors well above street level, because some local authorities insisted on it, and others who did not go so far as to insist encouraged it by requiring particulars to be deposited with plans stating the relationship of ground-floor level to level of crown of road. As regards attacks of dry rot, I believe this to be a matter of very considerable importance, because where the houses were placed some little distance from the road and the land sloped down towards them, and from the road, it tended to lift the floors well out of the ground. It was on land on the lower side that the wood floors, when placed at too low a level, were in most danger; on the higher side, paved sculleries and kitchens served as a second line, the paved space at back being the first line of defence against oncoming surface water.

It is, however, necessary to go even further back before we get at the full facts in such a way as to understand the essentially different requirements for substructural stability to houses built on open sites developed on garden-village lines and those huddled together in long streets close ranked. The earlier text-books were written mainly by architects as the result of their own experience and close observation, and gave rules bearing on sound construction based on reasoned opinion. They regarded it as elementary that the depth of the foundations required for stability was dependent on the nature of the subsoil and its ability to bear the contemplated load. For clay they again and again laid it down that it was unsafe to build at any less depth than four feet, not because clay could not bear a load at a lesser depth, but because it was liable to upsetting changes in times of prolonged rain or exceptional drought up to that depth. And as the architect had to put in four feet of walling, it was natural that he should, when possible, make use of the space enclosed, and he built basements or semi-basements and the like according to circumstances. The builder followed and put the cottage floor below ground-level. It would take too much space to detail the various objections to this, but on all hands it will, I think, be admitted that the principal defect that followed was damp. At the risk of appearing a little tedious I must stress this point, because nearly everything I have to say as to one of the greatest dangers to the new houses—the continuance of outbreaks of dry rot—turns on it.

Unless the floor and walls of a basement are made definitely impervious to moisture, damp must be admitted, and a great many of the new houses have basements to which damp is admitted. A basement is not any the less (when considered in this light) a basement because it is only nine inches instead of nine feet high. Not having any doors, windows, fireplaces and stairway, it may be all the more dangerous. If, therefore, we have a concrete mat below outside finished surface level with a joisted and boarded floor over, we have a basement, and if damp can find admittance, then one that is an ideal lodgment for Merulius Lacrymans. That we have a very large number of such basements on some estates is beyond dispute, and that they and the walls surrounding them are less sheltered than those put up by the speculative builder is a point of great importance.

If, therefore, we are to build houses that will on the average last longer than those of the speculative builder, and cost no more to maintain, we must build not only better than he did, but so much better as to discount his advantage of better shelter.

(To be continued.)

AERATED CONCRETE FOR FIRE-RESISTING FLOORS

In the report of the Building Acts Committee of the London County Council, the Council is now asked to approve the use of aerated cellular concrete, hollow or solid, in the construction of fire-resisting floors. The Building Acts Committee recommend that the Council, in pursuance of the powers vested in it by the First Schedule to the London Building Act, 1930, approve as fire-resisting, in the case of floors and roofs, aerated cellular concrete (in hollow or solid form), subject to certain conditions, of which the following are part:—(i.) All materials shall be to the satisfaction of the district surveyor, and the whole of the work shall be executed to his satisfaction; (ii.) the structural strength of the aerated cellular concrete shall not be taken into consideration in calculating stresses; (iii.) all constructional (*i.e.*, other than aerated cellular) concrete which is less than 2 in. thick at any part shall be fine concrete, mixed in the proportion of at least one volume of Portland cement to three volumes of aggregate composed of clean silicious sand and broken flint of all such sizes as will pass through a mesh three-eighths of an inch square measured in the clear; (iv.) when such aggregate is not "fully graded"; (*i.e.*, when such aggregate is not so varied in size that all voids can be filled with the cement paste, then the proportions shall be not less than one volume of Portland cement to two volumes of aggregate); (v.) in the case of block floors, the ends of the blocks shall be properly and fully jointed with cement mortar in the proportions of one volume of Portland cement to two volumes of clean sharp sand; (vi.) the concrete above the blocks shall be mixed in the same proportions as in the constructional portions of the floor; (vii.) apart from any requirements in respect of imposed loads and working stresses:—(1) The least diameter of the main tensile reinforcement shall not be less than one-quarter of an inch, (2) the least diameter of shear reinforcement (if any) shall not be less than three-sixteenths of an inch, and (3) both ends of all reinforcement shall be properly hooked to the satisfaction of the district surveyor; (viii.) when aerated cellular concrete blocks are not used as a part of the covering of the reinforcement, then the thickness of fine concrete (exclusive of any other material) covering the main tensile reinforcement shall be not less than three-quarters of an inch thick and not less than the diameter of such main tensile reinforcement; (ix.) when aerated cellular concrete blocks are used as a part of the covering of the reinforcement, then the constructional covering of the reinforcement shall be of fine concrete not less than one-half of an inch and not less than the diameter of such reinforcement in thickness, and the thickness of the aerated cellular concrete shall be not less than one-half of an inch; (x.) the sides and undersides of steel beams and girders shall be protected from the action of fire by fine constructional concrete at least 2 in. thick, rodded and rammed, or 1½ in. thick trowelled round suitable mesh reinforcement, and that in all cases the concrete shall be bedded solidly against the steel and there shall be no intervening cavity; (xi.) fillets, strips and blocks of wood or other combustible materials shall not be embedded in the thickness of the fine concrete necessary (1) to transmit stresses, (2) to provide protection to any steelwork or reinforcement, or (3) to comply with any of these conditions. There are four further conditions relating to thickness of the material in certain positions, while condition xvi. states that the dimensions specified in the foregoing conditions shall refer only to questions of fire-resistance and resistance to impact during fires, apart from any requirements in respect of imposed loads and working stresses under normal conditions of use.

RENT RESTRICTION

CLAIM FOR POSSESSION BY LESSEE.

An important point which appears to have been discussed before, but never hitherto definitely decided, was raised in the recent case Charvonia *v.* Esterman (*Weekly Notes*, June 20), before a Divisional Court, under section 2, sub-section (1) of the Rent Restriction Act, 1923. In 1918, the plaintiff had become tenant of a whole house which was subject to Rent Restriction, but the length of the lease or the nature of the agreement under which he held the house is not given in the present report. In 1926 he had sublet two rooms, but in 1928 had regained possession of these two rooms which, however, in the same year he sublet to the defendant, together with a third room, at a rent of £1 0s. 9d. a week. In 1930 the plaintiff gave the defendant, his sub-tenant, notice to quit, but the defendant declined to give up possession on the ground that he was protected by the Rent Acts, and the plaintiff then took these proceedings to recover possession, relying upon section 2, sub-section (1) of the Rent Act, 1923, which provides: "Where the landlord of a dwelling-house to which the principal Act (1920) applies is in possession of the whole of the dwelling-house at the passing of this Act (July 31, 1923), or comes into possession of the whole of the dwelling-house at any time after the passing of this Act, then from and after the passing of this Act, or from and after the date when the landlord subsequently comes into possession, as the case may be, the principal Act shall cease to apply to the dwelling-house. Provided that where part of a dwelling-house to which the principal Act applies is lawfully sublet, and the part so sublet is also a dwelling-house to which the principal Act applies, the principal Act shall not cease to apply to the part so sublet by reason of the tenant being in or coming into possession of that part, and if the landlord is in or comes into possession of any part not so sublet, the principal Act shall cease to apply to that part notwithstanding that a sub-tenant continues in or retains possession of any other part by virtue of the principal Act."

It may here be noted that this section was very carefully considered by the Court of Appeal in five cases which came before the Court in 1928, which we noted (*The Builder*, January 25, 1929) and on the first part of the section the majority of the Court held that the word "landlord" as there used may, in certain circumstances, include a lessee, apart from the proviso, though Lord Justice Scrutton, who dissented, held that the word "landlord" meant the "owner" with the one exception where section 12 (7) of the Act of 1920 applies, that is, where the rent payable is less than two-thirds of the rateable value. The proviso was discussed, but no case then before the Court fell within it.

The question has now directly arisen in the case under consideration, and the interpretation of the proviso by the Divisional Court was as follows: The three rooms in question formed a separate dwelling-house within the meaning of the Act of 1920, and that Act only decontrolled dwelling-houses erected after, or in course of erection on, April 2, 1919, or dwelling-houses which on that date had been or were being converted into self-contained flats, but part of a house let as a separate dwelling-house remained controlled; therefore, although in this case the separate dwelling-house consisting of these three rooms only came into existence after the passing of the Act of 1923, the plaintiff could only claim decontrol if he came within section 2 (1) of that Act. But the Court held that he could not succeed in this as he was not the "landlord of a dwelling-house," but the tenant of one, and he had never come into possession of the whole house as a landlord; he had occupied the whole house as a tenant, and as a tenant he had sublet part of it, and thus under the proviso, part of a dwelling-house to which the Act of 1920 applied had been lawfully sublet, and was itself also a dwelling-house under that Act to which that Act applied, and in such circumstances the proviso enacted "the principal Act shall not cease to apply to the part so sublet by reason of the tenant being in or coming into possession of that part."

It must be confessed that the position is still very obscure, and it is a pity that particulars are not given in the report of the nature of the lease under which the plaintiff held, but apparently the case falls within the observations of Lord Justice Greer in the cases before the Court of Appeal, where the proviso was discussed, though no case under it was before the Court. He is reported as having said (1929, 1 K.B., at page 139): "I read the proviso not as an explanation of the meaning of the substantive parts of section 2, but as an exception to it. I think, if it had not been there, a mesne landlord who had let part of a house as a separate dwelling-house, and could prove that he was in possession of that part on July 31, 1923, would have been entitled to say that the part dwelling-house was decontrolled. The proviso was put in to prevent the tenant of a whole dwelling-house which had not been decontrolled from profiteering as to part of the dwelling-house while his immediate landlord remained subject to control, and that the latter part of the proviso was inserted to enable his immediate landlord, if he got into possession of the rest of the house, to say that, at any rate, that part was decontrolled." The expression, "mesne landlord," as here used being apparently a tenant in the position of a "landlord," though not the freeholder.

It must, however, be noted that the letting of the whole house in this case to the plaintiff took place before 1923, viz., in 1918, but it would have been different if, at any time subsequent to the passing of the Act of 1923, anyone in the position of a "landlord" had obtained possession of the whole house, for then a subsequent letting of the whole house, or a sub-letting of part of it, would not revive the control which once had lapsed. See Barker *v.* Hutson, one of the cases decided by the Court of Appeal in 1928 (1929, 1 K.B., 103).

Billposting and Rent Restriction.

An unusual point under the Rent Restriction Acts was raised in the recent case, Gee *v.* Hazleton (*The Times*, June 24), before a Divisional Court constituted of three Lords Justices of Appeal. The defendant, who was a statutory tenant at a rent of £44 16s. a year of a dwelling-house which had vacant land frontage on a road, had granted to a billposting company the exclusive right of posting advertisements on boards and hoardings on the vacant land for a period of seven years at a rental of £46 a year. The landlord of the premises had claimed possession of that portion of the premises so used, but the County Court judge had refused to make an order on the ground that this was a mere licence that did not take the premises out of the protection of the Rent Acts. The Court reversed this decision on the ground that it was well established that the Rent Acts did not confer any right of property on the tenant, but only the personal right or privilege of occupying the dwelling-house. Here the defendant had given another person an irrevocable licence to occupy and use part of the premises for the purposes of their business, and thus had lost the protection of the Acts, and there was no distinction between a licence and a subletting. It appears from the report that the claim was limited to the land so used, and that the judgment applied to that and not to the whole premises.

A Builder's Estate.

Mr. Percy Cyril Farmer, builder and decorator, of Fircroft, Leatherhead, and of Ifield, Surrey, and Kennington Park-road, S.E., left £107,770, with net personalty £12,183.

NEW BUILDINGS IN LONDON

Barbican.—IMPROVEMENTS.—Messrs. Townsends (Builders), Ltd., 24, Dean-street, W.1, are carrying out improvements to premises in Beech-street for the Charing Cross and Central London Electricity Supply Co.

Barking.—EXTENSIONS.—Are being carried out at the Tangent Works, Abbey-road, by Messrs. Hammond and Miles, Ltd., Scrafton-road Works, Ilford. The work is estimated to cost about £2,000. The architect is Mr. S. Stanley Waghorn, A.R.I.B.A., 22, Essex-street, W.C.2.

Battersea.—ADDITIONS.—Mr. A. E. Sewell, architect to Messrs. Truman, Hanbury, Buxton and Co., Ltd., has prepared plans for alterations and additions to the "Halfway House" public-house, 393, Battersea Park-road. The work will cost £3,500 and the builders are Messrs. R. Schooley and Son, 5, Market-street, E.C.2.

Battersea. — ADDITIONS. — The Surveyor's Department of Messrs. Hillier, Parker, May & Rowden, 27, Maddox-street, W.1, have prepared plans for an addition at the rear of 81, Battersea-rise, abutting upon Northcote-road.

Camden Town. — EXTENSIONS. — Messrs. Hood Bros, of 8, Union-court, E.C.2, have prepared plans for extensions to a factory. Messrs. Rice and Son, Ltd., 15, Stockwell-road, S.W.9, are the builders.

Carlisle-street.—FACTORY.—Extensions are being carried out to the factory of Messrs. Compactom in Carlisle-street. Plans are by Messrs. Wallis, Gilbert and Partners, 29, Roland-gardens, South Kensington, S.W.7, and the contractors are Messrs. Bovis, Ltd., 35, High-street, Marylebone, W.1.

Croydon.—HOUSING.—The Housing Committee of the C.B. has prepared a scheme for 110 dwellings at £51,060 on the Old Town clearance area.

Devonshire-street.—PREMISES.—A block of old premises at 39-40, Devonshire-street, W.1, is to be reconstructed. Plans have been prepared by Sir John Burnet, Tait and Lorne, 1, Montague-place, W.C.1. The contractors are Messrs. Bovis, Ltd., 35, High-street, Marylebone, W.1.

Dulwich.—EXTENSIONS.—Messrs. Beresford Pite and Partners, 101, Gt. Russell Street, W.C.1, are the architects for extensions to the College. The lowest estimate has been submitted by Messrs. F. J. Moreton and Son, 171, Gipsy-road, S.E.27, but the work may not be carried out for some time.

Ealing.—FLATS.—Messrs. W. H. Read and Co., 42, Haven-green, W.5, have prepared plans for a block of flats in Park Hill and Kings-road. No contracts have yet been let.

Ealing.—SHOPS.—A block of 16 shops, with flats over, is to be erected at Bond-street and Uxbridge-road. The plans have been prepared by Messrs. North, Robin and Wilsdon, FF.R.I.B.A., Townsend House, Greycoat-place, S.W.1. The contract for the first section is being carried out by Messrs. G. Moss and Sons, Ltd., Northolt.

Edith-grove.—ADDITIONS.—Mr. B. Poulter, 27, Buckingham-gate, S.W.1, has made an application to Chelsea B.C. for additions to No. 7.

Edmonton. — PREMISES. — No. 7, Church-street has been demolished by Messrs. A. J. King, Ltd., of Southgate-road, N.1, who are to erect a new building on the site.

Edmonton. — SHOPS. — Mr. A. Hulbert, Whitta-road, E.12, staff architect to the London Co-operative Society, Ltd., is to prepare plans for block of shops and flats at the corner of North Circular-road and Blind-lane, N.

Edmonton.—HOUSES.—Mr. G. W. Newman, architect, 8, Bush Hill-road, N.21, has submitted two schemes to the U.D.C. for the erection of 72 houses and 51 houses on the Cambridge Arterial-road.

Finchley.—HALL.—An assembly hall is to be built in Ballards-lane to plans prepared by Mr. H. Douglas Kidd, A.R.I.B.A., 1, New-court, Lincoln's Inn, W.C.2. The work is for the Finchley Conservative Association.

Finsbury.—BUILDINGS.—A site at the corner of Cloudesley-road and Mantell-street, N.1, is to be developed to the plans now being prepared by Messrs. Percy Clarke and Son, 5, Arundel-street, W.C.2.

Forest Gate.—ALTERATIONS.—Mr. Percy Charles Boddy, F.R.I.B.A., 19, Palace-street, S.W.1, is the architect, and Messrs. Stedman Bros., New North-road, Barkingside, are the builders, for alterations to St. Edmund's Church, Catherine-road, E.7.

Forest Hill.—PREMISES.—New business premises are to be built on the east side of Havelock-street by Mr. E. C. Christmas, builder, 55, Dartmouth-road, S.E.23.

Great Queen-street.—Further buildings are being demolished by Mr. H. J. Moyes, 255, Clapham-road, S.W.9, for extensions to the Masonic building. The builders are Messrs. Walter Lawrence and Son, Ltd., Sun-street, Finsbury-square, E.C.2. The architects are Messrs. H. V. Ashley and Winton Newman, 14, Gray's Inn-square, W.C.1.

Hendon.—FLATS.—Mr. A. J. Butcher, A.R.I.B.A., 2, Express-mansions, Edgware, is preparing working drawings for a block of proposed flats in Vivian-avenue.

Holborn Bars. — REBUILDING. — Messrs. Greenham Demolition Co., Ltd., of 671, London-road, Isleworth, are demolishing the west wing of the Prudential Assurance Company's premises in Holborn Bars, E.C.1. The architects for the new building are Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4, and the builders are Messrs. Trollope & Colls, Ltd., 5, Coleman-street, E.C.2.

Holloway.—EXCHANGE.—H.M.O.W. are inviting tenders for erection of an employment exchange at Holloway, N. The Architect's Department, King Charles-street, S.W.1, have prepared the plans.

Hollywood-road.—DEPOT.—Extensions are to be undertaken at the depot of the United Dairies, Ltd., in Hollywood-road, S.W.7. Plans have been prepared by Mr. F. T. Dear, staff architect, 34, Palace-court, W.2. The contract is in the hands of Messrs. Bovis, Ltd., 35, High-street, Marylebone, W.1.

Hounslow.—HOUSES.—A number of houses are to be built on the Syon Hill estate, Great West-road, and Syon-lane, Hounslow. Plans have been prepared by Messrs. G. A. Gale, Ltd., Great West-road, Isleworth. The building contract is let.

Ilford.—FACTORY.—A new factory is now being erected on a site at the corner of Dane-road and Norman-road, by Messrs. A. W. Jaggers and Sons, Ripple-road, Barking, to plans by Mr. A. W. Jaggers.

Lower Thames-street. — REBUILDING. — Messrs. W. F. Blay, Ltd., 1, Dowgate Hill, E.C.4, are the builders for the rebuilding of the public-house premises at the corner of Lower Thames-street and Fish-street Hill. The work is for Messrs. Hoare & Co., brewers, whose surveyors' department have prepared the plans.

Morden.—ALTERATIONS.—And additions are to be undertaken at the branch distributing depot of the United Dairies, Ltd., Kenley-road. Plans have been prepared under the direction of Mr. F. T. Dear, staff architect, 34, Palace-court, W.2. The contract has been placed with Messrs. Bovis, Ltd., 35, High-street, Marylebone, W.1.

New Malden.—DEPOT.—A new distributing depot is to be erected in King's-avenue for the United Dairies, Ltd., Palace-court, W.2. Plans have been prepared by Mr. F. T. Dear, staff architect. The contract has been placed with Messrs. Bovis, Ltd., 35, High-street, Marylebone, W.1.

Northfields.—RECONSTRUCTION.—Mr. S. A. Heaps, of the Underground Railway Co., has prepared plans for reconstruction of Northfields Station. No contract has yet been placed.

Old-street. — ALTERATIONS. — H.M.O.W. have placed a contract with Messrs. J. Jennings and Son, Ltd., 42-44, Leman-street, Aldgate, E.1, for alteration to the branch post office.

Richmond.—EXTENSIONS.—Messrs. J. D. Mathews, Son and Ridley, 3, Paul's Bakehouse-court, E.C.4, are the architects for extensions to the Richmond Institution. No building contracts are likely to be placed for about two months.

St. Pancras.—TENEMENTS.—The B.C. has recommended Messrs. John Greenwood, Ltd., 12-14, Arthur-street, E.C.4, at £7,785, for the erection of 18 tenements of the Wolcot-street area of Somers Town.

St. John-street.—EXTENSIONS.—And alterations are to be made to the Northampton Polytechnic Institute, St. John-street, E.C.1. Plans have been prepared by Messrs. Campbell Jones, Sons and Smithers, 9, Dowgate-hill, Cannon-street, E.C.4. The contract will be carried out by Messrs. Dove Bros., Ltd., Cloudesley-place, Islington.

Sloane-avenue. — HOUSES. — Mr. E. W. Fisher, 10, Old Burlington-street, W.1, has submitted an application to the Chelsea B.C. for the proposed lay-out of houses on the Sloane-avenue estate, bounded by Cadogan-street, Sloane-avenue, Norman-street, and College-place. Nothing regarding the building contract has yet been settled.

Tottenham.—STORES.—Rebuilding of premises of the Imperial Cold Stores, Ltd., South Tottenham, N.15, after fire, is to be undertaken. Plans have been prepared by Messrs. Henry Butcher and Co., 63, Chancery-lane, W.C.2. The contractors are Messrs. Chessums, Ltd., Imperial Works, Portland-road, N.15.

Victoria.—DWELLINGS.—Plans have been prepared for the two blocks of dwellings at the corner of Regency-street and Causton-street, Victoria, S.W.1, for the Ecclesiastical Commissioners, 1, Millbank, S.W.1. The architects are Messrs. Clutton, 5, Great College-street, S.W.1.

Victoria Embankment.—FOUNDATIONS.—On a site next to Brettenham House, Messrs. William and Edward Hunt, FF.R.I.B.A., 30, Norfolk-street, W.C.2, have prepared plans for a new building. Messrs. Leslie and Co., of Kensington-square, W.8, have secured the contract for the foundations. No contract has yet been placed for the superstructure.

Warren-street. — RECONSTRUCTION.—Messrs. Balfour, Beatty & Co., Ltd., 66, Queen-street, E.C.4, are reconstructing the underground railway for the Underground Railway Co.

Wandsworth.—FLATS.—For the erection of 50 flats in Garratt-lane, for the B.C., the estimate of £30,400 submitted by Messrs. E. Clarke and Sons, of Melton Mowbray, has been recommended for acceptance. Mr. R. M. Pigott, F.R.I.B.A., 44, Bedford-row, W.C.1, is the architect.

Wembley.—EXTENSIONS.—Messrs. J. B Sharman, Ltd., West Cliff-road, Ramsgate, are the builders for extensions to the sorting office for H.M.O.W.

NEW CINEMAS

Bedlington, Northumberland.—It is understood that a picture hall and skating rink is to be erected on a site in Clayton-street, Bedlington Station, for Mr. J. G. Hall, of Melrose-terrace, Bedlington. The steelwork is being supplied by the Glasgow Iron Roofing Co. It is learnt that no contract for the brickwork has yet been let.

Ealing.—Work on the erection of the cinema at Northfields for the Walpole Hall, Ltd., will be carried out by direct labour under the building owners. The architect is Mr. Cecil Masey, F.R.I.B.A., 15, Caroline-street, W.C.1.

Newcastle-on-Tyne.—It is understood that a block of property in the Haymarket has been purchased by Mr. Dixon Scott, cinema proprietor, Tynemouth.

Rye.—Plans have been prepared for the erection of a new cinema on the site of the old Pavilion Theatre in Cinque Ports-street, Rye, for the proprietors of the Rye Electric Palace. The architect is Mr. H. Coussens, 35, Havelock-road, Hastings.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1931.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Accrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aldershot	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Alfreton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Alnwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Alnrincham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ashford (Kent)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ashington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ashton-under-Lyne	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aylsham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Berwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bexhill	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Birkenhead	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Birmingham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bishop Auckland	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Blackburn	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackpool	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bradford-on-Avon	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bridlington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromsgrove	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bromyard	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Bungay	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Burnley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury St. Edmunds	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Buxton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Cardiff	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Carlisle	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chesterfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chorley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cirencester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Clacton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cranbrook	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Crewe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cromer	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Darlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Deal	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Denbigh	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Derby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Devizes	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Dewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Doncaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Dorking	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
E.Glam.(Mon.Val.)	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ely	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Godalming	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Goole	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Gosport	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grantham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Gt. Yarmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Grimsby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Guildford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Halifax	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harpenden	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Harrogate	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hartlepools	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hatfield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hednesford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hereford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Herne Bay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Huddersfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hull	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hunstanton	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huntingdon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Isle of Wight	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Keighley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Kettering	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kidderminster	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kings Lynn	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leamington Sp	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leeds	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leicester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leighton Buzzard	1/2	1/2	1/2	1/2	1/2	1/2	1/2	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Littlehampton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Liverpool	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Llandudno	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Llanelly	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
London—								
12 m. radius	1/8	1/8	1/8	*		1/8	1/8	1/3
12-15 m. radius	1/7½	1/7½	1/7½	*		1/7½	1/7½	1/2½
Loughborough	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Lowestoft	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Luton	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Macclesfield	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Maidstone	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Malvern	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Manchester	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Mansfield	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Margate	1/4	1/4	1/4	1/4		1/4	1/4	1/0
MarketHarborough	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Matlock	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Melton Constable	1/2	1/2	1/2	1/3		1/3	1/3	10½
Melton Mowbray	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Merthyr Tydfil	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Middlesbrough	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Newark	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Newbury	1/3½	1/3½	1/3½	1/3½		1/3½	1/3½	11½
Newcastle-on-Tyne	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Newcastle-u-Lyme	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
New Forest	1/3½	1/3½	1/3½	1/3½		1/3½	1/3½	11½
Newmarket	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Newport, Mon.	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Northampton	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Norwich	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Nottingham	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Nuneaton	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Oakham	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Oldham	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Oxford	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Paignton	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Peterborough	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Plymouth	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Pontypridd	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Portsmouth	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Preston	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Ramsgate	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Reading	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Redcar	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Redditch	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Reigate	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Retford	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Ripon	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Rochdale	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Rochester	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Rugby	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Saffron Walden	1/2½	1/2½	1/2½	1/2½		1/2½	1/2½	11
St. Albans	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
St. Helens	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Sawbridgeworth	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Saxmundham	1/2½	1/2½	1/2½	1/2½		1/2½	1/2½	11
Scarborough	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Sevenoaks	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Sheffield	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Shrewsbury	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Sittingbourne	1/3	1/3	1/3	1/3		1/3	1/3	11½
Southampton	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Southport	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
South Shields	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Stevenage	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Stockport	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Stockton-on-Tees	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Stoke-on-Trent	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Stourbridge	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Stourport	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Stowmarket	1/3	1/3	1/3	1/3		1/3	1/3	11½
Stratford-on-Avon	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Stroud	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Sunderland	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Swaffham	1/2	1/2	1/2	1/2		1/2	1/2	10½
Swansea	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Swindon	1/5	1/5	1/5	1/5		1/5	1/4	1/0½
Tamworth	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Taunton	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Thetford	1/3	1/3	1/3	1/3		1/3	1/3	11½
Torquay	1/6	1/6	1/6	1/6		1/6	1/6	1/1½
Totnes	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½		1/3½	1/3½	11½
Tunbridge Wells	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Uttoxeter	1/4½	1/4½	1/4½	1/4½		1/4½	1/4½	1/0½
Wakefield	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Walsall	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Walsden	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Warminster	1/3	1/3	1/3	1/3		1/3	1/3	11½
Warrington	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Warwick	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Wells (Norfolk)	1/2	1/2	1/2	1/2		1/2	1/2	10½
Welwyn Gar. City	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
West Bromwich	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Weston-sup-Mare	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Weymouth	1/3½	1/3½	1/3½	1/3½		1/3½	1/3½	11½
Whitby	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Wigan	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Winchester	1/4	1/4	1/4	1/4		1/4	1/4	1/0
Windsor	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Winbech	1/3	1/3	1/3	1/3		1/3	1/3	11½
Wolverhampton	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2
Woodbridge	1/3	1/3	1/3	1/3		1/3	1/3	11½
Worcester	1/5½	1/5½	1/5½	1/5½		1/5½	1/5½	1/1½
Worksop	1/5	1/5	1/5	1/5		1/5	1/5	1/0½
Worthing	1/3½	1/3½	1/3½	1/3½		1/3½	1/3½	11½
Wrexham	1/6	1/6	1/6	1/6		1/6	1/6	1/0½
Wycombe	1/5	1/5	1/5	1/5		1/5	1/5	11
Wymondham	1/2½	1/2½	1/2½	1/2½		1/2½	1/2½	1/2
York	1/6½	1/6½	1/6½	1/6½		1/6½	1/6½	1/2

*The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, as and from the 1st February, 1931, is 1/10½ per hour.

For Building Trade wages in Scotland, see page 898.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor S.; Engineer, E

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

NOVEMBER 30.

Aberdeen.—Installation.—Electric wiring installation at Medical Block, New Infirmary, Foresterhill, for Directors of the Aberdeen Royal Infirmary. James B. Nicol, architect, 367, Union-st.

Acton.—Conveniences.—Additional conveniences at public baths, Salisbury-st., Acton, W.3, for T.C. W. G. Cross, B.E.

Barnsley.—Additions.—Small addition to cottage at screening chamber, Pontefract-rd., for C.B. B.E., Church-st.

Bedworth.—Houses.—26 parlour type at Bedworth Heath, for U.D.C. H. W. Crowther-Green, E. and S. Dep. £1 1s.

Cury (Lancs).—House.—Dwelling-house and appurtenances at Nanfan Farm, Cury. H. Richards, Nanfan Farm, Cury Cross, Lancs.

Grange.—Dressings.—850 cu. ft. of Portland stone finish quoins and dressings for open-air bathing and swimming-pool, for U.D.C. T. Huddleston, S.

Halifax.—Depot.—Structural steelwork in 'bus depot, Elmwood, for C.B. A. C. Tipple, Borough Engineer, Crossley-st., for C.B. Dep. £2 2s.

Kingston-upon-Hull. — Demolition. — Of sheds, Queen's Dock, South side, for T.C. H. Hamer, City E.

London.—Installation.—Electric lighting installation work at tenements for Bethnal Green B.C. H. W. Couzens, 9, Old Queen-st., S.W.1. Dep £2 2s.

Penyfai.—Building.—Superstructure of new Admission Hospital, Convalescent Home and Nurses' Home, and other works at Penyfai, Bridgend, for Glamorgan County Mental Hospital. W. Gough Jenkins, Clerk to the Committee of Visitors, Glamorgan County-hall, Cardiff. Dep. £2 2s.

Wakefield.—Alteration.—To ward 20 at Wakefield Mental Hospital, for West Riding Mental Hospitals Board. W. E. H. Burton, architect and engineer.

Wombwell.—Repairs.—Barnsley-rd. Council school (1) relaying floor boards in various class-rooms (2) repair of roof to teachers' lavatories and washhouse; Jump Council school (caretaker's house), conversion of privy, for West Riding C.C. C. Ellison, Divisional Clerk, Education Office, Swinton, Rotherham.

DECEMBER 1.

Acton.—Retiling.—Laundry block of Isolation Hospital, Wales Farm-rd., W.3, for T.C. W. G. Cross, B.E.

Chaddesden.—School.—Council school for 300 children, for Derbyshire C.C. G. H. Widdows, F.R.I.B.A., County Architect, St. Mary's-gate, Derby. Dep. £1 1s.

Eastbourne.—Conveniences.—Ladies' and gentlemen's lavatory accommodation at Devonshire baths, Carlisle-rd., for T.C. B.E.

Macclesfield.—Repairs.—Repairs to existing water tower and erection of steel and brick water tower at Wardle-cres., Cross-lane, Gawsworth, near Macclesfield, for R.D.C. J. H. Walters, E. and S., Congleton. Dep. £1.

DECEMBER 2.

Dun Laoghaire.—Dwellings.—56 artisans' dwellings on site known as Allotments' Field, Kill-av., for Corporation. P. J. Hernon, Borough Manager. Dep. £1 1s.

Euston, N.W. — Telephone Exchange. — For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Falmouth.—Houses.—34, at Penwerris, for T.C. H. E. Tresidder, B.S. Dep. £2 2s.

Gravesend.—Wiring.—Electric wiring for lighting at Isolation Hospital, Whitehill-lane, for Corporation. E., Electricity Dept., 17, Harmer-st.

Hendon.—Houses.—26 working-class dwellings on Glebe Housing site, Great Stanmore, for R.D.C. H. W. Rackham, S. Dep. £2 2s.

Tamworth.—Houses.—164 houses and construction of roads and sewers on Bolehall site, for T.C. A. Oswald Marshall, B.E. and S.

DECEMBER 3.

Eton.—Housing.—External roughcasting, etc., to 20 houses at Iver, for R.D.C. A. Gladwell, Housing Architect. Dep. £1 1s.

Glasgow.—Painting, etc.—Painter work: (a) Garngad housing scheme, 132 houses; (b) Cuthelton-st. scheme, 534 houses. Iron railings and gates: (a) Garngad housing scheme, 132 houses; (b) Cuthelton-st. scheme, 534 houses. Iron railings at bank steps: Parkhouse, Balmore, Ashfield, and Possil housing schemes, for T.C. D. Stenhouse, T.C.

Helston.—Bungalow.—At Falmouth-rd., Helston. J. Williams, 28, Wendron-st.

Ossett, Yorks.—Alterations and Additions.—To Post Office, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

DECEMBER 4.

East Ham.—Public Swimming-bath, Slipper-baths, etc.—For Corporation. Town Clerk, Town Hall, E.6. Dep. £2 2s.

Edinburgh.—Houses.—106 houses and 2 shops, comprising the 7th and 8th developments of Niddrie Mains housing scheme, for T.C. E. J MacRae, A.R.I.B.A., City Architect.

London.—Wiring.—Wiring work for Electricity Department of Hammersmith B.C. Borough Electrical Engineer, "Electric House," 154, Uxbridge-rd., Shepherd's Bush, W.12.

Watford.—Post Office (second section).—Erection of, for H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

DECEMBER 7.

Cleethorpes.—Shed.—Open cart shed at Poplar-rd. depot, for U.D.C. L. W. Pye, E. and S.

Darton.—Houses.—34 non-parlour at Staincross and 26 non-parlour at Higham, for U.D.C. J. H. Hinchliff, architect, Hill Top, Clapton West, near Huddersfield.

London.—Repairs.—Cleaning, painting and minor repairs, etc., at Grove Park Hospital, Lee, S.E.12; King George V. Sanatorium, Godalming, Surrey; and Pinewood, Wokingham, Berks, for L.C.C. Chief Engineer, Old County Hall, Spring-gdns., S.W.1. Dep. £1 each.

Manchester.—Alterations.—At Hyde-road car depot to form ticket department, for T.C. City Architect. Dep. £1 1s.

Nottingham.—Fencing.—Unclimbable iron fencing and gates and other appurtenant work, in parishes of Selston, Normanton-on-the-Wolds, and Stanton-on-the-Wolds, Notts, for T.C. F. W. Davies, Engineer and General Manager, Water Department, Castle Boulevard. Dep. £2 2s.

Penygroes.—Extensions.—Alterations and extension to existing hall, for Memorial Hall Committee. D. G. Owen, Manager, Midland Bank, Penygroes, S.O.

Slough.—Wall.—Dwarf wall and brick and concrete piers, including wrought-iron gates and railings, for U.D.C. A. Bromly, E.

DECEMBER 8.

Barnes. — Cottages. — Pair of semi-detached cottages at site of girls' central school, Lonsdale-rd., for U.D.C. E. and S.

Barton-upon-Irwell.—Houses.—Six at Flixton, for R.D.C. C. Faulkner, clerk. Dep. £2.

Dorchester.—Houses.—12 at Charminster, and 2 at Tolpuddle, for R.D.C. F. T. Maltby, L.R.I.B.A., chartered architect, Dorchester.

Frome.—School.—New senior school, for Managers of the St. John's Church of England Schools. A. J. Pictor, architect, Abbey-chams., Bath. Dep. £2 2s.

Limerick.—School.—At Parteen. J. Moloney, Parteen.

***Pembury.**—Nurses' Home.—At the Tonbridge Poor Law Institution, for the Kent C.C. The Architect, Sessions House, Maidstone. Dep. £2 2s.

Ranmoor (Sheffield).—Telephone Exchange, for H.M.O.W., Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

DECEMBER 9.

Belfast.—Shed.—Also collateral works on west side of Turning Basin, Co. Antrim, for Harbour Commissioners. T. S. Gilbert, consulting engineer, Harbour Office.

Chipping Norton.—Enlargement.—Of casual ward block at Poor Law Institution, for Oxfordshire C.C. G. T. Bennett, C.S., 8, New-rd., Oxford. Dep. £1 1s.

Leeds.—Post Office Garage. For H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Norfolk.—Alterations.—To Downham Market Poor Law Institution, for C.C. C. J. Norton, A.R.I.B.A., Stracey-rd., Norwich. Dep. £1 1s.

DECEMBER 10.

Stamford Hill, N.—Telephone Exchange, for H.M.O.W., Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

DECEMBER 14.

Basford.—Conversion.—Closet conversion scheme at Ruddington, for R.D.C. Stephen Maylan, E. and S. Dep. £2 2s.

Ilkeston.—Houses.—Pair of houses in Chapel-st., and construction of footpaths, drainage, and fencing, for T.C. B.E.

Kiveton Park.—Conversions.—Improving sewage disposal works and for converting into water closets 190 pail and privy closets in parish of Anston, for R.D.C. S.

***Slough.**—Houses.—80, for the U.D.C. A. Bromley, S. Council Offices, William Street.

DECEMBER 15.

***Launceston.**—Alterations and additions to Post Office, for H.M.O.W. Contracts Branch, King Charles Street, London, S.W.1. Dep. £1 1s.

DECEMBER 16.

***London, N.**—Employment Exchange.—Erection of, at Holloway, for H.M.O.W. Contracts Branch, King Charles Street, London, S.W.1. Dep. £1 1s.

DECEMBER 18.

Cardiff and Newton Abbott.—Site works, etc. For the Central Electricity Board. Secretary, Trafalgar-buildings, 1, Charing Cross, London, S.W.1. Dep. £1 1s.

DECEMBER 31.

***Bishops Stortford.**—Alterations.—And additions at Haymeads Institution, for the Herts C.C. Clerk, Public Assistance Office, Hertford. Dep. £5 5s.

MARCH 1, 1932.

Uruguay.—Slaughterhouse.—Large slaughterhouse and plant, for Frigorifico Nacional. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. G.X. 10927.)

NO DATE.

Torquay.—Shops.—New shops, Hele Cross, for Co-operative Society, Ltd. H. Cecil Powell, F.R.I.B.A., 3a, Higher-ter.

West Dereham.—House.—House near Abbey Farm, West Dereham, for T. A. W. Nicholson. J. W. Grouch, architect and surveyor, 3, Post Office-lane, Wisbech.

Wing.—Houses.—6 at Cheddington, for R.D.C. H. A. Rolls, L.R.I.B.A., chartered architect, 15, Bridge-st., Leighton Buzzard. Dep. £1 1s.

MATERIALS, etc.

NOVEMBER 30.

Chepping Wycombe.—Mains.—3,200 yds. of 6 in. and 2,517 yds. of 4 in. steel pipe, coated and double wrapped, together with necessary special pipes and bends, for T.C. S. Young, Water Engineer, 71, Easton-st., High Wycombe. Dep. £2.

Leicester.—Highway Materials.—For T.C. A. T Gooseman, City S.

Stoke-on-Trent.—Lead.—For pig lead, for T.C. W. H. Makepeace, sewage engineer, Leek-rd.

Stoke-on-Trent.—Sewage.—8,048 yds. of pipes, for T.C. W. H. Makepeace, sewage engineer, Leek-rd.

West Sussex.—Tar, etc.—For C.C. H. W. Bowen, C.S., Southgate House, Chichester.

West Sussex.—Road Materials.—For C.C. H. W. Bowen, C.S., Southgate House, Chichester.

DECEMBER 1.

Middleton.—Road materials, etc.—For T.C. B.E.

DECEMBER 2.

Hull.—Paints, etc.—For Public Cleansing Department. Thos. Douglas, Director of Public Cleansing.

St. Thomas.—Road Materials.—For R.D.C. J. S. Madge, S., Brooklands, Heavitree, Exeter.

DECEMBER 3.

Buxton.—Highway Materials.—For T.C. F. Langley, B.E.

DECEMBER 4.

Belfast.—Portland Cement, etc.—For City and District Water Commissioners. W. I. Quinn, secretary, Water Office.

DECEMBER 7.

Dublin.—Paints, etc.—For Commission Irish Lighthouse Service. J. B. Phelps, secretary.

DECEMBER 12.

***Doncaster.**—Furniture.—For Police Station and Court House. Clerk, County Hall, Wakefield.

East Suffolk.—Road Materials.—For C.C. W. Jervis, C.S., Ipswich.

DECEMBER 19.

Isle of Wight.—Road Materials.—For C.C. A. J. A. Harris, County Highway Surveyor, County Hall, Newport, I.W.

DECEMBER 21.

Hereford.—Highway Materials.—For T.C. City E.

DECEMBER 22.

London.—Highway Materials.—For Lambeth B.C. O. Cattlin, B.E.

DECEMBER 23.

Angora.—Bricks, etc.—Refractory bricks and mortar, for Ministry of National Defence. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. B.X. 7188.)

ENGINEERING, IRON AND STEEL.

NOVEMBER 30.

Chepping Wycombe. — Waterworks. — Carting, laying and jointing of about 8,200 yds. of 6 in. and 2,517 yds. of 4 in. steel pipe, together with sluice valves, air valves and hydrants, for T.C. S. Young, Water Engineer, 71, Easton-st., High Wycombe. Dep. £2.

London.—Extension of existing bridge carrying High-rd., Lee over River Quaggy, for C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £2.

Macclesfield.—Sewerage.—1,800 yds. of 15-in. dia. and 1,200 yds. of 21-in. dia. stoneware sewers, together with manholes, etc., and including river crossings and appurtenant works, for T.C. G. Bertram Kershaw, chartered civil engineer, 9, Victoria-st., Westminster, S.W.1. Dep. £5.

Plymouth.—Steelwork.—Structural steelwork of approximately 14 tons, for T.C. City Electrical Engineer, Armada-st.

Runcorn.—Sewage Disposal Works.—At Helsby, for R.D.C. J. O. Hunter, 69, High-st. Dep. £3 3s.

Todmorden.—Mains.—6 in., 4 in., and 3 in. mains and various specials in connection with Heptonstall water supply, for R.D.C. E. P. Brook, Waterworks Engineer, Gibbet Hill, Halifax. Dep. £1 1s.

Windcomb.—Water Supply.—For R.D.C. L. W. Barnard, E., Promenade, Cheltenham. Dep. £1 1s.

DECEMBER 1.

Clown.—Improvements.—Alterations and improvements to sewage disposal works in parishes of Barlborough, Clown, Creswell and Whitwell, for R.D.C. J. T. Pears, E. and S. Dep. £2 2s.

Egypt.—Water Supply.—For Atf power station, for Commercial Secretary to the Residency, Egypt. Department of Overseas Trade (Room 80), 35, Old Queen-st., London, S.W.1. (Ref. G. 10788.)

Llandrindod Wells.—Extension.—Laying and jointing about 1,000 yds. of 8-in. cast-iron pipe rising main; supplying pipes for same; and construction of reservoir, for U.D.C. Piddian & Dooley, engineers, 13, Church-st., Stourbridge. Dep. £2.

Southall-Norwood.—Sewerage.—6¾ miles of cast-iron, concrete and stoneware sewers from 12 to 36 in. in dia., partly in tunnel, and of sewage purification works, comprising grit chambers, sedimentation tanks, trickling filters, etc., for U.D.C. A. J. Martin, E., 108, St. George's-sq., Westminster, S.W.1. Dep. £3 3s.

DECEMBER 2.

Tutbury.—Extensions.—To sewerage in parish of Barton-under-Needwood, for R.D.C. Willcox & Raikes, 33, Great Charles-st., Birmingham. Dep. £5 5s.

DECEMBER 3.

Westbourne.—Sewerage.—Sewerage and sewage disposal works, for R.D.C. S. T. Taylor, Sanitary Surveyor. Dep. £5 5s.

DECEMBER 4.

Cockermouth.—Water Supply.—In parishes of Dean and Eaglesfield, for R.D.C. A. E. Simpson,

DECEMBER 5.

Congleton.—Drainage.—Sewage disposal works in connection with alteration and reconstruction of existing sewage disposal works, for T.C. Edw. Wilson Dixon, E., 3, East-parade, Leeds. Dep. £3 3s.

Ormskirk.—Sewerage.—Sewage disposal works at Lathom and Burscough, for U.D.C. H. B. Ward, consulting engineer, 26, North John-st., Liverpool. Dep. £3 3s.

DECEMBER 7.

Axbridge.—Mains.—Laying 3,500 yds. of 2 in. cast-iron main and 350 yds. of 1 in. wrought-iron pipe, with the work auxiliary thereto, at Wedmore, for R.D.C. Parker Pearson & Ross Hooper, engineers, Dallas-chambers, Chippenham. Dep. £2 2s.

Belper.—Sewerage.—Sewers and sewage disposal works, for U.D.C. Charles J. Lomax & Son, chartered civil engineers, 37, Cross-st., Manchester. Dep. £5 5s.

Clutton.—Sewerage.—Sewerage and sewage disposal works at Timsbury, for R.D.C. Thomas & Morgan, engineers, 23, Gelliwastad-rd., Pontypridd. Dep. £5.

Epsom.—Sewerage.—Pumping station, provision, laying and jointing of a 9 in. cast-iron pumping main of about 1,080 yds. in length, including crossing River Mole and other appurtenant works at Fetcham, for R.D.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

Epsom.—Drainage.—18 in., 15 in., 12 in., 9 in., and 7 in. sewers for total length of about 10,000 yds., together with manholes, flushing tanks, and ventilating shafts, also for construction of settlement tank, filter, humus tank, pipe lines and other appurtenant works at Chessington, for R.D.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Dep. £5.

Sittingbourne and Milton.—Sewerage.—Cast-iron and stoneware pipe sewers, including manholes, syphons, ventilating columns, and other works incidental thereto, for U.D.C. A. P. I. Cotterell & Son, engineers, 54, Victoria-st., Westminster, S.W.1. Dep. £5 5s.

Thakeham.—Extension.—To water supply at Storrington, for R.D.C. H. B. Nichols, 13, Victoria-st., S.W.1. Dep. £5.

DECEMBER 8.

Calstock.—Water Supply.—To parish of Calstock, for R.D.C. Lemon & Blizard, consulting engineers, 24, Lockyer-st., Plymouth. Dep. £3 3s.

DECEMBER 9.

Belfast.—Shed.—Shed and collateral works on west side of turning basin, Co. Antrim, for Harbour Commissioners. T. S. Gilbert, consulting engineer, Harbour Office.

Bingham.—Manholes.—Laying of approximately 260 yds. lin. of 9-in. sewer with manholes, etc., at Works-lane, Barnstone, for R.D.C. C. W. Kendrick, S. Dep. £1.

Ystradgynlais.—Improvements.—To water supply, for R.D.C. Gerald Swayne, E., 1, Victoria-st., S.W.1. Dep. £2 2s.

DECEMBER 10.

Langport.—Water Supply.—At Aller Huish and Muchelney, for R.D.C. W. Herbert Bateman, E., Batheaston, Bath. Dep. £5 5s.

Mablethorpe and Sutton.—Sewers.—Sewers and sewage disposal works, for U.D.C. Silcock & Simpson, consulting engineers, 25, Victoria-st., Westminster, S.W.1. Dep. £5.

DECEMBER 11.

Holmsley.—Sewage.—606 yds. 6-in., 445 yds. 7-in. and 225 yds. 9-in. salt glazed ware sewers, and 46 yds. of 6-in. cast-iron pipe, together with manholes; also sewage purification works, in parish of Oswaldkirk, for R.D.C. Silcock & Simpson, engineers, 10, Park-row, Leeds. Dep. £2.

Newton-le-Makerfield.—Sewerage.—Sewerage and sewage disposal works, for U.D.C. Elliott & Brown, chartered civil engineers, Burton-bldgs., Parliament-st., Nottingham. Dep. £4 4s.

Shardlow.—Extensions.—Sewerage and sewage disposal works at Chaddesden, for R.D.C. Elliott & Brown, chartered civil engineers, Burton-bldgs., Parliament-st., Nottingham. Dep. £3 3s.

Shardlow.—Sewerage.—Sewerage and sewage disposal works at Melbourne, for R.D.C. Elliott & Brown, chartered civil engineers, Burton-bldgs., Parliament-st., Nottingham. Dep. £3 3s.

DECEMBER 12.

Warblington and Westbourne.—Sewerage.—Laying about 17,000 lin. yds. of 6-in., 9-in. and 12-in. sanitary and cast-iron pipe sewers, with necessary manholes and flushing chambers; sewer crossings under railways, and other incidental works, for Joint Drainage Committee. Taylor & Wallin, engineers, 1, Saville-pl., Newcastle-on-Tyne. Dep. £10.

DECEMBER 14.

Belfast.—Improvements.—Harbour improvement works at Ballycastle, County Antrim, for Government of Northern Ireland. Ministry of Finance, 13, Ormeau-av., Belfast (Room 20). Dep. £10.

Middlesex.—Sewers.—Main sewers of brickwork, concrete and cast-iron segments, total length 4 miles along valley of Brent, for C.C. Dodd & Watson, engineers, Wellington-house, Bennett's-hill, Birmingham.

Todmorden.—Reservoir.—Reinforced concrete service reservoir at Cross Hills, for Heptonstall water supply, for R.D.C. H. C. Ritchie & Partners, Royal Liver-buildings, Liverpool.

DECEMBER 15.

Donaghadee.—Waterworks.—Reservoir and other waterworks, for U.D.C. Sir Alex. Binnie, Son & Deacon, engineers, Artillery House, Artillery-row, Westminster, S.W.1. Dep. £10.

New Zealand.—Towers.—270 galvanised steel transmission line towers, complete with arms, ground stubs and accessories, for Public Works Dept. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. G.X. 10703).

DECEMBER 16.

London.—Bridge.—Steel and concrete bridge at entrance to Deptford Playing Fields, Deptford Bridge, S.E., for Deptford B.C. B.E. and S. Dep. £1 1s.

Swansea.—Shafts.—Subaqueous tunnels and shafts, dock intake and discharge and foundations for power station at Tir John North, for C.B. Sir Cyril Kirkpatrick, consulting engineer, 25, Victoria-st., Westminster, S.W.1. Dep. £10 10s.

DECEMBER 17.

Ilkeston.—Reservoir.—Reinforced concrete reservoir, for T.C. Herbert Lapworth, E., 25, Victoria-st., Westminster, S.W.1. Dep. £5.

DECEMBER 18.

Castleford.—Sewerage.—Pumping station, pump well, detritus tank and storm tanks at Council's present pumping station site at Inge-lane; construction of percolating filter, dosing tank and humus tanks, various alterations to existing works and removal and replacement of filtering medium in existing percolating filters at Council's sewage treatment works in Wheldale-lane; alteration of several existing manholes, and construction of a new storm overflow in town, together with various subsidiary works, for U.D.C. L. Birch, E., Town Hall. Dep. £3 3s.

Redditch.—Sewerage.—Five miles of stoneware sewers of 6 in., 9 in. and 12 in. dia., and of sewage purification works, comprising grit chambers, sedimentation and stormwater tanks, filters, etc., for U.D.C. Lieut.-Col. A. J. Dickinson, E. Dep. £3 3s.

DECEMBER 21.

Oxford.—Waterworks.—Extensive waterworks installation and 2 lengths of pipeline, at Swinford, for T.C. Sir Alex. Binnie, Son & Deacon, Artillery House, Artillery-row, Victoria-st., Westminster, S.W.1. Dep. £10.

DECEMBER 23.

Stockholm.—Bridge.—Construction of Stockholm Western bridge, for Stockholm Harbour Board. Dept. of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. No. G.X. 10897.)

ROAD, SEWERAGE, AND WATER WORKS.

NOVEMBER 30.

Chester.—Making-up.—New street with tar macadam surfacing; passage at rear of Raymond-st. and Garden-lane; passage at rear of Watergate-st. and Stanley-pl.; passage at rear of Watergate-st.; passage at rear of Stanley-pl.; passage at rear of Albion-st.; passage off and rear of Queen-st. and St. Thomas'-pathway, for T.C. Charles Greenwood, City E. and S. Dep. £1 1s.

Hendon.—Sewers.—At Hankins-lane and Marsh-lane, Mill Hill, for U.D.C. A. O. Knight, E. Dep. £5 5s.

Malpas.—Main.—Extension of water main, Chester-rd., for R.D.C. A. C. Eccleston, clerk, 40, Dodington, Whitchurch.

Todmorden.—Excavation and Refilling.—Of approximately 4,400 yds. of trenches, also laying and jointing of 6 in., 4 in. and 3 in. mains, including the necessary specials, for Heptonstall water supply, for R.D.C. E. P. Brook, Waterworks Engineer, Gibbet Hill, Halifax

DECEMBER 1.

Aberdeen.—Water Supply.—Supplying and laying about 2 miles of c.i. pipes, 4 in. dia. and under, with fittings, etc., for Newburgh District, for C.C. Jenkins & Marr, civil engineers, 16, Bridge-st., Aberdeen.

Chingford.—Making-up.—George-rd., Brodie-rd., Hortus-rd., for U.D.C. S. J. Hellier, E. and S. Dep. £1 1s. each road.

London.—Making-up.—Of Pauntley-st., N.19, for Islington B.C. B.E.

Weymouth and Melcombe Regis.—Making-up.—Southlands-rd. (part of), Sudan-rd. (part of), Clearmount-rd., Khartoum-rd., for T.C. R. W. Vine, B.E. and S.

DECEMBER 2.

Hailsham.—Sewer.—6-in. sewer, North-st. and Hugletts-lane, Heathfield, for R.D.C. W. O. Humphery, E.

Hendon.—Making-up.—6 various roads, for R.D.C. H. W. Rackham, S. Dep. £3 3s

Hendon.—Sewer.—533 yds. lin. 30-in. surface water outfall sewer, with manholes, etc., complete, at Cannon-lane, Pinner, for R.D.C. H. W. Rackham, S. Dep. £2 2s.

Hove.—Making-up.—Cranmer-av. and Milcote-av., for T.C. T. R. Humble, B.S.

Norton.—Sewerage.—At Totley, for R.D.C. S.

Wembley.—Making-up.—Of Victoria-av., Sudbury Heights-av., Part I, for U.D.C. C. R. W. Chapman, E. and S. Dep. £1 1s. each.

DECEMBER 3.

Southampton.—Road.—Demolition works, an construction of new road to Civic Centre, and construction of new road round the east side of the Bargate, for C.B. B.E. Dep. £2 2s. each.

Southend-on-Sea.—Making-up.—Of Adalia-crescent and Daines-way, Section 1, and incidental works, for C.B. Robert H. Dyer, B.E. and S. Dep. £2.

Wanstead.—Making-up.—Of Bressey-grove, Section 2, for U.D.C. E. and S.

DECEMBER 4.

Hornsey.—Road.—Making-up Wood-vale, 2nd Section, for T.C. W. H. Adams, B.E. and S.

DECEMBER 5.

Newton Abbot.—Mains.—Laying about 6¼ miles of 6 in., 4 in. and 3 in. cast-iron water mains in the parishes of Stokeinteignhead and Haccombe-with-Combe, for R.D.C. S. Dep. £2 2s.

DECEMBER 7.

Esher and the Dittons.—Laying of cast-iron pipe and concrete tube sewers at Thames Ditton, for U.D.C. E. and S. Dep. £3 3s.

Knaresborough.—Drainage.—Main sewer approximately 1,743 1-3 lin. yds. in length, tunnelling and manholes in connection with drainage of "Scotton Banks," for R.D.C. A. E. W. Lupton, E., 14, Bower-rd., Harrogate. Dep. £2.

St. Albans.—Sewers.—Stoneware and concrete pipe sewers, each approximately 1¼ miles in length, for T.C. City E. Dep. £2 2s.

South Shields.—Making-up.—Streets on housing estate at Boldon Colliery, for R.D.C. W. Welsh, surveyor and architect, Council Offices, East Boldon.

Swinton and Pendlebury.—Sewer.—600 yds. of 27-in. and 21-in. diameter concrete tube sewer, together with manholes, etc., for U.D.C. H. Entwisle, E. and S.

DECEMBER 8.

Axminster.—Water Supply.—Water supply works at Uplyme, for R.D.C. W. Herbert Bateman, E., Batheaston, Bath. Dep. £2 2s.

Southgate.—Making-up.—6 various roads, for U.D.C. R. Phillips, S. Dep. £2.

Yiewsley and West Drayton.—Making-up.—Ferrers-av. and Bagley-close, West Drayton, for U.D.C. W. T. Morgan, S. Dep. £2 2s.

DECEMBER 9.

Birmingham.—Sewerage.—3,460 yds. of brick and concrete stoneware pipe and concrete tube sewers, and about 2,200 yds. of stoneware pipe drains in Walsall-rd., Tower-hill, Queslett-rd., and in private lands, Perry Barr, for T.C. H. H. Humphries, City E. and S. Dep. £2.

DECEMBER 14.

London.—Making-up.—Also widening of Bedford-walk, between Phillimore-gdns. and Campden Hill-rd., for Kensington B.C. B.E. and S.

DECEMBER 17.

Richmond (Surrey).—Roads.—Carriageways for housing scheme within borough, for T.C. B.E. Dep. £1 1s.

NO DATE.

Ewell (Surrey).—Roads.—Concrete roads and sewers, about 900 yards run. Atkinson & Marler, surveyors, 1, Park-av., Ewell

Public Appointments

DECEMBER 7.

***Huddersfield.**—Clerk of Works. H. E. G. Hall, Secretary, Huddersfield Royal Infirmary

NO DATE.

***Southampton.**—Clerk of Works.—Required by the Co-operative Society. 122, St. Mary's-rd., Southampton.

Correction.

Messrs. Samuel Worboys & Sons, of Potters Bar, inform us that they have not secured the contract for the Congregational Schools at Guildford, as stated in our issue of November 20.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council R.D.C. for Rural District Council; E.C. for Education Committee; B C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Abergavenny.—R.D.C. to erect 34 houses.

Ambie (Northumberland).—U.D.C. approved plans for additions to Masonic hall in Gloster-ter.

Arnold.—U.D.C. to complete Brookfield housing estate by erection of houses. R. E. Clarke, S.

Askern.—U.D.C. to carry out improvement at junction of High-st. and Station-rd. for erection of new shops.

Atherstone.—R.D.C. approved: 8 bungalows, Erdington-rd., T. Slack; extensions, factory, Owen-st., Ball & Sons.

Auchinairn.—For County Area of Auchinairn and Bishopbriggs, Lanarkshire C.C. to erect 50 houses. Architect, P. Smith, Housing Offices, Hamilton.

Barnsley.—Permanent church to be erected for St. Barnabas' Mission Church (Rev. G. H. Stanney, curate).

Barnstaple.—Additional expenditure on Barnstaple Corporation Electricity Works amounting to £16,500 is contemplated by report of Council's consulting engineer, J. H. Rider, of London, on further development of undertaking.

Bedlington.—Doctor Pit Welfare Committee approved laying-out of land next to Welfare-park as sports ground and are to build pavilion.

Beeston.—U.D.C. approved: Bank in High-rd., National Provincial Bank Ltd.

Bingley.—U.D.C. propose pavilion, Myrtle-pk.

Birmingham.—Essex & Goodman, FF.R.I.B.A., 21, Waterloo-st., architects for block of offices. Tenders invited.

Bishop Auckland.—U.D.C. approved footbridge near railway station at £600.—Scheme for extensions to sewage disposal works under consideration by U.D.C. J. Ford, S.

Blaydon.—U.D.C. proposes 50 houses at Highfield.

Bolton.—Bradshaw Gass & Hope, FF.R.I.B.A., 19, Silverwell-st., preparing plans for church at Tong Moor, Bolton, for Congregational Church Trustees.

Brodsworth.—Brodsworth Main Colliery Co., acting jointly with Miners' Central Welfare Committee, propose new pit-head baths and canteen. Tenders invited by Architect's Dept. of Central Welfare Committee.

Bury.—Joint Hospital Board propose additions to existing hall at Aitken Sanatorium, Holcombe Brook.

Cadder.—Lanarkshire C.C. to erect housing scheme. Architect, P. Smith, Housing Offices, Hamilton.

Cambois (Northumberland).—Bedlington U.D.C. given permission to Cowpen Coal Co. to erect bridge and aerial ropeway over road at Cambois.

Cannock.—E.C. propose cookery centre at Beltrd. schools, Hightown, at £2,000.

Carlisle.—Churchwarden of St. Cuthbert's Church presented Bishop with cheque for £290, from congregation of St. Cuthbert's to assist in the work of church extension in Carlisle. The money will be utilised for completion of purchase of a site for new church to meet the needs of Raffles district.

Carlisle.—Sketch plans been prepared for houses for R.D.C.

Chesterfield.—R.D.C. reversed decision and decided to proceed with 12 houses.

Chester-le-Street.—R.D.C. received sanction to erect 136 houses at Birtley and Fatfield.

Chryston.—Plans prepared and approved for temporary school accommodation for Chryston Higher Grade school. Architect, J. Stewart, Education Offices, Motherwell.

Clelland.—Plans prepared for reconstruction and additions to Clelland and Amoa primary school. Architect, J. Stewart, Education Offices, Motherwell.

Cockerton.—Parishioners of St. Mary's Church are raising money for parochial hall.

Cramlington.—Council to acquire by compulsory means land for housing.

Croydon.—C.B. received sanction to borrowing £40,800 for mental hospital extension, and £21,737 for four humus tanks, etc., Beddington farm.—C.B. to consider a revised lay-out of Waddon housing estate extension.—Sanction received from Electricity Commissioners to £2,507 for sub-station.—M.H. approved land at Mitcham-rd. cemetery for sub-station.—Sub-station proposed at Woodmere-av., Ham Farm, at £480.—Plans passed: E. Holbrook & Son, 72, Lower Addiscombe-rd., showroom addition, 115, Addiscombe-rd.; G. Whittaker, 13, Queen Anne's-gate, S.W.1, dispatch dept. and cloakrooms, at Arcade, George-st. and North End; Batchelar (Kennards), Ltd., North End, lock-up showrooms, London-rd. and Bensham-lane; P. Richardson, 62, High-st., 6 houses and 1 garage, Grange-rd., S.E.; H. Miller, 29, Post Office-rd., Cobham, 6 houses and garages, Wickham-rd., next lodge; J. G. Cooper, Haling Park Estate Office, Nottingham-rd., 11 houses, Whitgift-av.; R. T. Grove, "Lincluden," Beaumont-rd., S.W.19, 6 houses, 92-102, Westway, 4 houses, 4-10, Southway; R. T. Grove, "Lincluden," Beaumont-rd., S.W.19, house, 3a, West-way, and 34 houses, 41-59 and 2-48, Bennetts-way; H. A. Heath, 27, Stafford-rd., store and warehouse, 19, Stafford-rd.; Surrey Wholesale Electrical Co., Church-path, warehouse and store, next 1, Church-path; H. Macintosh, East Croydon, 24 houses and garages, 1-23 and 49-71, The Ridgeway; Mariners, Ltd., 379, Brighton-rd., motor showroom, 379, Brighton-rd.; C. W. Sawyer, 24, Foxley-rd., motor showrooms, 781, London-rd.; Randall, Slade & Co., Ltd., 226, Portland-rd., 25 garages and w.c., Woodside-av., rear Nos. 21-31; T. Hart, 1, Bert-rd., 12 garages, off Bert-rd.

Dagenham.—Building programme of Essex E.C. provides for school site in Marsh Green area.

Darlaston.—U.D.C. approved: New workshops, Richards-rd., C. Richards & Sons, Ltd.,

Derby.—T.C. to erect central market on Morledge site. C. H. Aslin, A.R.I.B.A., Borough Architect.

East Riding.—C.C. decided to adapt house known as "The Avenue" as infirmary with maternity ward. B. Stamford, County Architect.

Edmonton.—U.D.C. approved: A. S. Soutar, 9 houses in Lawrence and Brettenham-rds.; H. P. Sanders, lay-out of roads, sewers and 46 houses west of Alexandra-rd.; North Metropolitan Electric Power Supply Co., sub-station, Ladbroke-rd.; W. A. Sendall & Co., 14 houses, St. Peter's-rd.; Kye Electric Co., 3 storage sheds at factory in Bridport-rd.

Eston (Yorkshire).—U.D.C. arranged further development of Grangetown estate by erection of two-bedroomed houses. Plans by E. and S.

Gateshead-on-Tyne.—Plans prepared by C.W.S. Architects' Dept., 90, Westmoreland-rd., Newcastle, but no contract yet been placed for branch premises for Co-operative Society.

Glasgow.—Plans prepared for school clinic at Crail-st. Architect, T. Somers, C.E., George-sq.—Plans prepared for reconstruction and repairs of Cramlinhill Chemical Works for R. Young & Co., Ltd., Elliot and Houldsworth-st. Architect, R. Walker, Hardie & Smith, 108, Douglas-st.—Plans prepared for alterations, etc., at 1354, Springburn-rd. Architect, A. Lochhead, 65, West Regent-st.

Hailsham.—R.D.C. approved: 28 houses, South-rd., Hailsham, for Bolney Wood estate.

Hamilton.—Offices and garage at 4, John-st. by W. Bannatyne, Ltd., River-ter.

Harpenden.—U.D.C.'s proposal to purchase Harpenden Hall for use as Council offices at £7,000 been considered at Public Inquiry.

Harthill.—Housing scheme for Harthill area of the county to be undertaken by Lanarkshire C.C. Architect, P. Smith, Housing Offices, Hamilton.

Hexham.—U.D.C. propose to construct omnibus station.

Hinckley.—R.D.C. recommend application to M.H. for sanction to houses: Earl Shilton, 128; Barwell, 24; and Stoney Stanton, 12.—Council decided to purchase land on Gravel Pit Farm at Earl Shilton for housing.

Huddersfield.—Board of Management of Royal Infirmary to erect block for institution, fronting Portland-st., at £75,000.

Huyton.—U.D.C. considering lay-out plan for some 1,400 houses with shopping centre of 60 shops.

Kettering.—U.D.C. approved: F. G. Barlow (Builders), Ltd., 6 houses, Bath-rd.; E.C., infants' school, Laburnum-cres.

Kidlington.—C.E. Authorities propose senior school at Gosford-hill estate, off Banbury-rd. R. F. Dodd, F.R.I.B.A., architect, 21, Turf-st., Oxford.

Kirkham.—Governors of Grammar School propose extensions to school buildings.

Lancashire.—Mental Hospital Board approved scheme for reconstruction of steam heating and hot water services, alterations to annexe night block, farm and church at Prestwich Mental Hospital, at £82,000.

Langport.—R.D.C. instructed architect to prepare plans for 8 proposed houses.

Leamington Spa.—T.C. approved: Bicycle sheds, factory, Tachbrook-rd., H. Griffith & Son; alterations, Scala Cinema, Bedford-st., A. U. Morris.

Leeds.—Site with frontage to new arterial-rd. and Regent-st. been acquired by Central Garage, Ltd., of Bradford, for new workshops and garage. Plans by Ross & Sons, architects, Bradford.

Lincoln.—Wesleyan Authorities propose chapel and Sunday school in Addison-drive, St. Giles. Cost £6,000.

Liverpool.—C.B. Authorities propose permanent Church of Holy Spirit and parsonage at new housing estate in parish of Knotty Ash (Vicar, Rev. Canon Frank J. Powell).—Co-operative Society propose shops at Moss-lane and Halstead-rd. Evan Roberts, architect, The Arcade, Lord-st

Liverpool.—E.C. propose elementary school for 1,000 scholars at Knotty Ash, at £20,000. A. D. Jenkins, Land Steward and Surveyor.

Loanhead.—Plans prepared for £17,000 reconstruction and extension scheme on Loanhead public school. Architects, Midlothian Education Department Staff, Drumsleigh-gardens, Edinburgh.

London (Deptford).—L.C.C. recommend borrowing by B.C. of £2,793 for registrar's office.

London (Finsbury).—B.C. to spend £387 10s. on adapting 21, Whiskin-st.

London (Finsbury).—L.C.C. recommend borrowing by B.C. of £5,000 for housing purposes in Margaret-st.

London (Fulham).—B.C. to borrow £1,800 for sub-station buildings.

London (Hammersmith).—B.C. to borrow £1,400 for buildings for sub-stations.

London (Lewisham).—B.C. approved: Weston & Bidwell, lock-up shops and market, High-st., Lewisham; H. & J. Taylor, medical centre, Churchdown, Downham; R. B. Rowell, 13 houses, De Frene-rd.; R. B. Rowell, 11 houses, Perry-rise; W. J. Brise, houses, Senlac-rd., Lee; A. Frampton, billiard hall, Old Bromley-rd., Catford.

London (Paddington).—B.C. to apply to L.C.C. for £21,860, for additional works at public hall, Porchester-rd.

London (Wandsworth).—B.C. to apply for loan of £33,966, for 50 flats in Garrett-lane, S.W.

Manchester.—Chappel Bros., Ltd., London, acquired premises at Longley-rd., Pendleton, which they propose to reconstruct for canning works. Alterations to plans of architect, A. Scott.

Manchester.—Roberts & Wood, architects, 26, King-st., preparing plans for petrol filling station and garage at junction of Sale-rd. and Button-lane, Northenden, for H. Parish.—Plans approved by T.C. for alterations and additions to Opera House, Quay-st., for Howard & Wyndham, Ltd. J. Cameron, architect.—Permanent Church of St. Dunstan's to be erected in Bluestone-rd., Moston, by Rev. J. M. Routledge, at £20,000.

Middlesbrough.—S. H. Clarke, 89, Grange-rd., architect for Church of England hall at Whinney Banks. Direct labour will be used.

Muirhead.—Housing scheme for area of Muirhead to be undertaken by Lanarkshire C.C. Architect, P. Smith, Housing Offices, Hamilton.

Newcastle.—Housing Committee of T.C. approved lay-out plan for 340 houses on Scotswood Munition College area.

Newcastle-on-Tyne.—T.C. propose to alterations to Corporation baths and washhouses in Shipley-st., Byker.—Rev. R. Hall, Vicar of St. Luke's Church, proposes completion of church at £8,000.—Proposal of City Council to construct baths and washhouses at Scotswood. Cost £35,297. F. Holford, City Architect.—Contract not yet been placed for warehouse in Crawhall-rd., for Mawson & Son. W. Dixon & Son, 1, Collingwood-st., architects.

Nuneaton.—Further extensions to be made to General Hospital, according to annual report.

Okehampton.—T.C. to make application to M.H. to borrow £13,000 for purposes of water supply.

Oswestry.—R.D.C. to erect 40 houses. C. B. Barnes, S.

Otley.—U.D.C. approved large shed, for Dawson. Payne & Elliott.

Portmadoc.—Council to build 25 houses.

Portslade.—London C.C. to spend £504 on reinstatement after fire, farm buildings at Mile Oak L.C.C. school.

Preston.—C.B. approved:—B. Crabtree, for T. Parish, extensions, Corporation-st.; A. C. M. Lillie, for J. Topping & Sons, showrooms, London-rd.; F. Howarth, for Trustees, Methodist Sunday school, Eldon-st.; Barton Townley, extensions, Hope-st. and Kendal-st.; G. E. Tonge, cinema, New Hall-lane; G. Moorcroft, for Ribbleton Theatre and Cinema Co., Ltd., cinema, Blackpool-rd.

Prestwick.—Plans prepared for alterations at Queen's Hotel. Architects, Carruthers & Foote, High-st., Ayr.

Ramsbottom.—U.D.C. to erect public baths at £6,500 in Bolton-st.

Renfrewshire.—Plans approved by Housing Committee:—new offices for Anderson (Newton Mearns), Ltd., Newton Mearns, at Kilmarnock-rd., Whitecrays. Architects, R. Johnstone & Sons, Newton Mearns

Rickmansworth.—U.D.C. proposing to purchase land for housing in various districts.

Rochester.—Plans passed:—12 houses, Jackson-av., H. W. Bowman; 10 houses, Lansdowne-rd., Shave Bros.

St. Ives.—T.C. decided to apply to M.H. for sanction to borrow £2,570 for land, and £4,500

*See also List of Contracts, Competitions, etc.

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for plant for new reservoir for supplying Carbis Bay with water.

Sale.—Board of Management of Sale and District War Memorial Hospital, Charlton-drive, propose extension to buildings. Plans by Matley, Brotherton & Mills, L.R.I.B.A., architects, 11a, Old Millgate, Market-place, Manchester.

Salsburgh.—Lanarkshire C.C. to erect for county area of Salsburgh, 32 Improvement Trust houses. Architect, P. Smith, Housing Offices, Hamilton.

Sheffield.—Brightside and Carbrook Co-operative Society, Ltd., City Stores, Exchange-st., propose stores on City and Beaumont-rds., Manor estate. Mr. H. Webster, architect, Norfolk-row, preparing sketch plans.

Sheffield.—E.C. propose central kitchen, at £7,700.—Committee propose £10,000 for new junior dept., Manor estate.—£600 proposed at Nether Edge.

Shettleston.—Reconstruction scheme at 1672, Shettleston-rd., Glasgow. Architect, J. Aitchieson, 170, Hope-st.

Shotts.—Reconstruction and extension, St. Patrick's School (Catholic). Plans approved at £3,850. Architect, J. Stewart, Education Offices, Motherwell.

Slough.—U.D.C. received M.H. approval to sanitary convenience.—Plans passed: F. G. Smart, 6 houses, Furnival-av.

Solihull.—Plans passed by R.D.C.—6 pairs of houses, Marshall Lake-rd., Biddle & Homer, Ltd.; 8 houses, corner of Streetsbrook-rd. and Sharman's-cross-rd., Mason Bros.; 7 houses, Streetsbrook-rd., Mason Bros.; 18 houses, Waste-lane, Knowle, Grove & Boldry.

Southport.—Co-operative Society, Ltd., Botanic-rd., acquired site in Eastbank-st., formerly tram sheds, for stores. Plans in Architects' Dept., Co-operative Society, Ltd., Balloon-st., Manchester.

South Shields.—Horseley Hill football ground been purchased by G. A. Smith, of Smith's, Ltd., furnishers, Mile End-rd., and it is understood that it is intended to convert ground into greyhound coursing track.—Mental Hospital Committee of T.C. resolved to negotiate with Sunderland or Gateshead for enlargement of mental hospital.

South Shields.—Offices for Hanlon's, Ltd., to be erected in Alexander-st. Mr. Howard Hill, L.R.I.B.A., 10, Winchester-st., architect.—T.C. approved plans for bakery in Back Broderick-st. for W. H. Parker. H. Hill, 10, Winchester-st., architect.—T.C. to provide additional accommodation at Poor Law Institution at £320.—E.C. propose to proceed with secondary school for accommodation of 550 boys.

Stafford.—R.D.C. adopted scheme for 22 new houses.

Stamford.—T.C. decided to build 18 more parlour-type houses on King's-rd. frontage of playing field.

Stansfield.—Lanarkshire C.C. to erect 32 houses at Station-rd. Architect, P. Smith, Housing Offices, Hamilton.

Stockton-on-Tees.—B.E. prepared plans for omnibus garage in Boathouse-lane for T.C. Tenders invited.

Stroud.—R.D.C. resolved to make application to M.H. for sanction to borrowing £12,670 for 36 houses in Dudbridge-lane, Rodborough.

Sunderland.—Sanction for 100 houses at Tunstall and Ryhope been received by R.D.C.

Sutton Coldfield.—Birmingham Corporation Gas Dept. propose branch showrooms and fittings stores in Birmingham-rd. Plans by Peacock & Bewlay, FF.R.I.B.A., 83, Colmore-row, Birmingham.

Swanage.—U.D.C. approved: E. R. Parsons, concert hall in Shore-rd.

Tynemouth.—Marshall & Tweedy, Mervyn House, Pilgrim-st., Newcastle, architects for improvements to Grand Hotel.

Upholland.—U.D.C. received formal sanction for 24 houses to erect on Hall Green site. M.H. sanctioned 8 non-parlour type houses on site in Grimshaw-lane.

Urmston.—U.D.C. propose public conveniences at £1,400. Architect, F. H. Brazier, 7, Market-st., Altrincham.

Wakefield.—T.C. approved: Simpson & Moxon, alterations and additions, "Dog and Gun" Inn, Kirkgate, for Beverley Bros., Ltd.

Wallingford.—Plans in course of preparation for milk factory and garage by Co-operative Wholesale Society in St. John's-rd.

Welwyn Garden City.—Housing Committee to proceed with 50 non-parlour type houses and 6 flats or houses for aged persons.

West Boldon.—Harton Coal Co., Ltd., promised Rector of West Boldon, land for parish hall.

West Hartlepool.—Scheme under consideration by T.C. to demolish 95 houses in High-st. area and erect 94 new dwellings at £40,000.

West Thurrock.—New senior school to be built at West Thurrock for Essex E.C.

Whitwood.—Plans approved for 4 shops fronting Methley-rd., L. Birch. Tenders invited.

Widnes.—T.C. approved:—lay-out of land for 27 houses off Highfield-rd., J. E. Farrell; sub-station off eastern Approach-rd. to Ditton railway bridge, for Mersey Power Co., Ltd.

Windsor.—T.C. approved: Coach station and garage, St. Leonard's-rd., East Surrey Traction Co., Ltd., rebuilding 28, High-st. and 1, Peascod-st., Montague Burton, Ltd.

Yarmouth.—T.C. approved: 4 houses, Cradock-av., H. R. Middleton & Co., Ltd.; new store and house, Southgates-rd., Trinity House Corporation; 2 pairs semi-detached houses, Bernard-rd., Gorleston, F. A. Osborne; 2 pairs of semi-detached houses, Beatty-rd., C. Munford.

York.—T.C. approved: H. Williamson, 14 houses, Hull-rd.

TRADE NEWS

Restoring Stonework.

Szerelmey, Ltd., are carrying out the restoration of the stonework of the Guildhall, Winchester; they are also engaged in similar work at St. Maurice's Church in that city.

Metalwork.

A new catalogue of drawn metal mouldings, which are supplied in bronze, "Staybrite," stainless steel and "Cupro" nickel, has been issued by Cooke's (Finsbury), Ltd., of Hamilton-road, N.5. This seems to be a most comprehensive catalogue and contains a large variety of sections, with construction details, and prices per foot.

The "Aero-Cycle."

Architects planning factories are sometimes pressed to provide gangways for transport operators which take up valuable space. Such planners will be interested in an apparatus, the "Aero-Cycle," which runs in the roof of the building and will tow or push on a monorail trolleys loaded up to 1 ton. A pedal-hoist attachment can be supplied, consisting of a clutch and power take-off that can be attached to the hoist. The patentors design special plant to suit any particular job. Full details are available from Messrs. Geo. W. King, Ltd., Hitchin, Herts.

Steel Plate Fans.

The Sturtevant Engineering Co., Ltd., issue from 147, Queen Victoria-street, E.C.4, a publication (No. 1056) relating to steel plate fans. Modern fan technique has become an important branch of engineering, and may be defined as the application of aerodynamics to industrial requirements with special relation to questions of heating, drying, air conditioning, dust collecting, fume and steam removal, mechanical draught, etc. Architects should obtain a copy of this well-produced publication.

A Colour Card.

A year ago the British Engineering Standards Association issued a British standard schedule of colours for ready mixed paints (B.S.S. No. 381—1930), containing 57 agreed colour patterns with self-explanatory colour names, and the colourimetric value of each colour in the appendices. In response to a number of requests for something of less bulk and cost, the Association has published a British standard colour card, which includes all the colours given in the schedule.

Copies of the card (reference No. 381C—1931) may be obtained on application to the Publications Department, British Engineering Standards Association, 28, Victoria Street, London, S.W.1, price 2s. 2d. post free.

The Problems of Industry.

With a view to providing facilities for the employees to meet together to discuss social questions, Mr. T. Harwood Redfern, a director of Redfern's Rubber Works, Ltd., of Hyde, Cheshire, has aranged a series of discussions on "The Problems of Industry," to be held at the works during the winter months. The subject is divided into four sections: (1) The Social Background; (2) The Individual Background; (3) The Field of Commerce; (4) The Trend of the Future. The speaker will commence the proceedings with a short talk on each subject, and afterwards the meetings will be open for questions and debate.

Light by Night.

Contractors for building or road works requiring up-to-date lighting for night work will with advantage look into the merits of the paraffin vapour lamp. Details of the "Tilley" lantern, now before us, indicate that this patent lantern will give a light of 300 c.p. for six hours at a cost of one penny. Holding enough oil for 10 hours with one filling, the lantern is strongly made in stout brass, and there are no parts to rust, corrode or get out of order. A steady light, uninfluenced by the weather, is obtained. These qualities should commend the lantern to the builder, contractor and decorator, who can obtain fuller details from the Tilley Lamp Co. (Dept. B), Hendon, N.W.4.

Flat Roofs and Civil Aviation

Science and mechanical progress advance so quickly these days that a call for suitable accommodation for gyroplanes or other light aircraft in the way of landing stages and suitable housing upon the tops of buildings may not be so far distant. Is it too hopeful to anticipate that the day is not far distant when the proprietors or chiefs of businesses in town will want to fly from their residences in the suburbs or the country to their business premises and back again home after the day's work is done? A flat roof at either end would, under these circumstances, be a *sine qua non*, more particularly so at the business end. Should one conclude that this idea is definitely within the bounds of reasonable possibility in the near future, then the problem will arise as to the most suitable waterproofing system to employ to proof the flat roof, the construction of which will be under consideration. Vulcanite, Ltd., have been engaged in covering flat roofs of wood and concrete construction with their specialised system of waterproofing for some 30 to 35 years, and they claim to be the original pioneers of their class or system of roofing. A roof covering of an elastic and pliable nature would certainly be called for so as better to withstand the vibration and concussion caused by landing planes, in conjunction with the possible movement of the building, and we understand that this is one of the first claims that Vulcanite, Ltd., make regarding their system of waterproofing flat roofs. Their address is 96, Peckham-road, S.E.15.

BALLAST, SAND AND ALLIED TRADES ASSOCIATION.

The half-yearly general meeting of this Association was held at Olympia on Thursday, November 12. Mr. Joseph Sabey announced the unavoidable absence through illness of the chairman, Mr. F. Wells. Mr. A. J. Arnold was then elected to the chair. The half-yearly report, which was read by Mr. Arnold, stated that the membership was now 231, an increase of 83, as shown in the annual report. It was evident that the loading line and delivery ticket system, which had been the main plank on which the Association had worked, had become a recognised means of accepting delivery of materials which were sold by the cubic yard. The number of loading line plates issued for the use of members was 2,750, and 319,500 delivery tickets. The central committee had been supplemented by five regional committees for the purpose of decentralising the work of keeping in touch with members and introducing new members.

A suggested arrangement with the Short Distance Hauliers' Alliance failed to materialise, as it was felt that any agreement with an organisation which was concerned in regulating prices would be detrimental to the present policy pursued by the Association. The central committee certainly showed foresight in having two of its members elected to the Building Divisional Council of the British Engineering Standards Association, the object of which was to bring about greater efficiency and economy in the building industry and also the introduction of some measure of simplification in all building commodities of everyday use. The members elected were Messrs. A. J. Arnold, of Messrs. Joseph Arnold and Sons; and H. E. Peirce, of Messrs. Hall and Co., Ltd.

Progress had been made in getting the various municipal councils to stipulate the delivery of materials on the system adopted by the Association, and a further conference had taken place with the London Master Builders' Association and Public Works Contractors' Association on this subject.

The following resolution was carried unanimously: "That this meeting passes a vote of confidence in the central committee and endorses their actions during the past year." The meeting closed with a vote of thanks to the acting chairman.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

[PRINCIPAL CHANGES OF THE WEEK.—Considerable reductions in the price of wood are recorded. Building deal drops by amounts ranging from £6 for 4" by 9" to £1 10s. for 3" by 4". Planed boards, plain edge flooring, T. & G. flooring, matching and battens are also largely reduced in price. Sawn laths are raised in price by 3d. per bundle.]

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Best Stocks 4 3 6
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	£ s. d.		£ s. d.
Fletton, at King's Cross	2 11 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 13 3	Bo. Bullnose	9 15 0
Do., Bullnose	3 5 3	Blue Wire Cuts	7 5 0
White Midhurst Facing Bricks (delivered London site)			5 0 0

Best Stourbridge Fire Brick:—
2½ in. ..... 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretcher ...	21 0 0	D'ble Str'tch'rs	29 10 0
Headers	20 10 0	D'ble Headers	26 10 0
Quoins, Bullnose and 4½ in. Flats	27 10 0	One Side and two Ends ...	30 10 0
		Two Sides and one End ...	31 10 0
		Splays, and Squints ...	28 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours Hard Glaze £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. " "	2 4	4 in. "	3 6

	s. d.	
Thames Ballast	8 0 per yd	delivered 2 miles radius Paddington
Pit Sand	11 0 " "	
Thames Sand	11 0 " "	
Best Washed Sand	11 6 " "	
½ in. Shingle for Ferro-Concrete	8 6 " "	
¼ in.	11 0 " "	
½ in. Broken Brick	10 6 " "	
Pan Breeze	8 0 " "	

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35s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0	7	6
Vitocrete " "	0	7	6
Super Cement (Waterproof)	1	12	0
Ciment Fondu (F.O.R. Works)	4	15	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" Pink	5	10	0
Plaste ,Coarse, Pink	3	0	0
" , White	3	12	6
" Fine	5	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	10	9
Chalk Lime	2	10	9
Best Ground Blue Lias Lime	1	17	6
Hair .....per cwt.	2	2	6
Granite Chippings	1	12	0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s 6d. if returned in good condition within three months carr. pd.
Stourbridge Fireclay in s'cks 37s. 0d. per ton at riy. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, perjft. cube 4 5½
White basebed, 3d. per ft. cube extra.
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

CHILMARK—RANDOM BLOCK—
At Nine Elms, per ft. cube 3 11

HOPTON-WOOD STONE—
F.O.R. Quarries, Wirksworth, Derbyshire, ft d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides ..... " 22 6
Sawn three or four sides ..... " 27 0

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London
6 in. sawn two sides landings to sizes (under 30 ft. super) .....Per ft. super 1 6
6 in. rubbed two sides, ditto..... " 6 0
2 in. sawn two sides slabs (random sizes " 2 3½
1 in. to 2½ in. sawn one side slabs (random sizes) ..... " 1 6½
1½ in. to 2 in. ditto, ditto ..... " 3 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks .....Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) .....Per ft. super 5 1½
6 in. rubbed two sides, ditto ..... " 6 1½
4 in. sawn two sides slabs (random sizes) " 2 1½
3 in. ditto ditto " 2 10
2 in. self-faced random flags.....Per yd. super 8 0

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£24 10	3 × 6	£17 0
4 × 9	20 0	3 × 11	19 10
4 × 8	20 0	2 × 11	19 10
4 × 7	18 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19½ 10
3 × 7	18 0	3 × 4½	17 10
2½ × 7	18 0	3 × 4	17 10

PLANED BOARDS.

1 × 11 ..... £22 10 1 × 9 ..... £21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
⅝	16/-	1½	25/-
¾	17/-	1¾	27/6
1	20/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.	Inches.	per sq.
1	21/-	⅝	15/-
1¼	26/-	¾	16/6
1½	27/6	1	20/-

ins. BATTENS. s. d
⅝ x 2.....per 100 ft. 2 0

MATCHING (BEST).

Inches.	per sq.
⅝	15/-
¾	16/6
1	20/-

SAWN LATHS. s. d.
Per bundle 2 3

1 INCH AND UP THICK.

Average price for prime quality.	£ s. d.
Dry Austrian Wainscot, per ft. cubs.....	0 15 0
Dry American and/or Japanese Figured Oak, per ft. cube.....	0 12 0
Dry American and/or Japanese plain Oak, per ft. cube	0 10 0
Dry sq. edged Honduras Mahogany, per ft. cube.....	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube.....	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube...	0 10 0
Best Scotch Glue, per cwt. ... £4 10 0 to	—
Liquid Glue, per cwt. ..... 4 7 0 to	5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12	31 0 0	18 by 10	17 5 0
22 by 12	27 19 6	18 by 9	15 10 0
22 by 11	25 5 0	16 by 10	14 14 6
20 by 12	24 7 6	16 by 8	11 5 0
20 by 10	20 17 6		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. Per 1,000.

	f.o.r. London.
Best machine-made tiles from Broseley or Staffordshire district	£5 2 6
ditto hand-made ditto	5 7 6
Ornament l ditto	5 12 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.	
R.S. Joists, cut and fitted.....	£12 16	0
Plain Compound Girders	14 10	0
" Stanchions	16 10	0
In Roof Work	19 10	0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to ¾ in.	10 15 0
½ in.	11 0 0	⅞ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ¼ in. and under.	Fittings. Over ¼ in.	Flanges. ¼ in. and under.	Flanges. Over ¼ in.
	%	%	%	%	%	%
Gas	62½	50	45	47½	55	57½
Water	58½	46½	40	42½	50	52½
Steam	55	42½	35	37½	45	47½
Galv. gas ...	50	37½	35	37½	45	47½
Galv. water...	45	32½	30	32½	40	42½
Galv. steam	40	27½	25	27½	35	37½

*C.I.—HALF-ROUND GUTTERS—London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	10d.	7½d.	2½d.
3½ in.	10½d.	8½d.	2½d.
4 in.	10½d.	9½d.	2½d.
4½ in.	11½d.	10½d.	2½d.
5 in.	1/1½	11½d.	3½d.

*O.G. GUTTERS.

3 in.	1/0	10½d.	2½d.
3½ in.	1/0½	10½d.	2½d.
4 in.	1/1½	10½d.	2½d.
4½ in.	1/2½	1/0½	2½d.
5 in.	1/5	1/2½	3½d.

*RAIN-WATER PIPES, &c.

Per yd. in 6 ft. Pipe.		Bends, stock Branches angles, stock angles.	
2 in. plain.....	1/2½	9½d.	1/2
2½ in. "	1/3	10½d.	1/2/4
3 in. "	1/6½	1/1½	1/8½
3½ in. "	1/11	1/4½	1/11½
4 in. "	2/2½	1/7½	2/4½

*The above R.W. Goods prices are subject to an advance of 5% from October 29th, 1929.

L.C.C. COATED SOIL PIPES—London Prices ex Works

	Bends, stock Branches. Pipe, angles, stock angles.	Bends, stock Branches. Pipe, angles, stock angles.
	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 1½	1 6½
2½ in. "	2 6	1 8½
3 in. "	2 8	1 10½
3½ in. "	2 10½	2 4
4 in. "	3 3	2 7½

						2 9½
						3 3
						3 9

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Bends, stock Branches. Pipe, angles, stock angles.	Bends, stock Branches. Pipe, angles, stock angles.
	s. d.	s. d.
2 in. per yd. in 9 ft. lengths	3 6	4 3
4 in. "	1 1 20	4 9 5 2 8 10
5 in. "	1 2 22	6 3 9 0 14 5
6 in. "	2 0 6	6 11 10 11 18 1

Gaskin for jointing 41/- per cwt.

	Per ton in London. £ s. d.	£ s. d.
IRON—		
Common bars	10 10 0 to	11 0 0
Staffordshire Crown Bars Good merchant quality	10 15 0 to	11 10 0
Staffordshire Marked Bars	14 0 0 ...	15 0 0
Mild Steel Bars	9 10 0 ...	10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 0 0 ...	9 0 0
Hoop iron, basis price	11 0 0 ...	12 0 0
" Galvanised ...	27 0 0 ...	28 0 0
Soft Steel Sheets, Black—		
Ordinary sizes, to 20 g. ...	11 0 0 ...	11 10 0
" " " 24 g. ...	12 0 0 ...	13 0 0
" " " 26 g. ...	14 0 0 ...	15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.....	13 10 0 ...	14 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	14 10 0 ...	15 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.....	17 10 0 ...	18 10 0
No. 1 quality £4 per ton extra.		
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes 6 ft. to 9 ft. to 20 g.	13 0 0 ...	14 0 0
Ordinary sizes 6 ft. to 9 ft. to 22 g. and 24 g.	14 10 0 ...	15 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 10 0 ...	17 10 0
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	18 0 0 ...	19 0 0
Best Soft Steel Sheets. 22 g. and 24 g.	20 0 0 ...	22 0 0
Best Soft Steel Sheets, 26 g.	21 10 0 ...	23 0 0
Cut Nails, 3 in. to 6 in. ...	15 0 0 ...	16 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	23 0 0
Pipe in coils	23 10 0
Soil pipe	26 10 0
Compo pipe	27 0 0

NOTE.—Country delivery, 20s. per ton extra; lots under 2 cwt. 3s. per cwt. extra, and over 2 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.
Old lead, ex London area, at Mills .....per ton £13 0 0

COPPER.

		s. d.
Seamless Copper tubes (basis).....	per lb.	0 9½
Strong sheet.....	"	0 10
Thin	"	0 11
Copper nails.....	"	1 0
Copper wire	"	0 11

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz

RIVER PATTERN SCREW DOWN MAIN FERRULES.

¼ in.	⅜ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1¼ in.	2 in.	2 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ...	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ...	35/-	45/-	66/-	126/- "

TIN.—English Ingots, 1/4 per lb. SOLDER.—Plumber's 8d., Tinmen's 9d., Blowpipe 10d. per lb.

*The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—(*cont.*)

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes ..... per gallon ...	0 2 3
„ „ „ in barrels ... „ ...	0 2 5
„ „ „ in drums ... „ ...	0 2 8
Boiled „ „ in barrels ... „ ...	0 2 8
„ „ „ in drums ... „ ...	0 2 10
Turpentine in barrels	0 4 4
„ in drums (10 galls.) „ ...	0 4 7
Genuine Ground English White Lead, per ton	47 10 0

(In not less than 5-cwt. casks.)
Extra for 1-cwt. kegs over 5-cwt. casks is 5/0 cwt.

GENUINE WHITE LEAD PAINT.

	£ s. d.
"Feilder Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morgansowyte," "Polseco," "Y" Brand, and other best brands (in 14-lb. tins) not less than 5 cwt. lots. per ton delivered ...	65 10 0
Red Lead, Dry (packages extra) ... per ton	33 0 0
Best Linseed Oil Putty ..... per cwt.	0 13 6
Size. XD quality ..... fkn.	0 3 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per ft.	Per ft.
15 oz. fourths ... 2½d.	32 oz. fourths ..... 7½d.
15 „ thirds ... 3½d.	32 „ thirds ..... 9½d.
21 „ fourths ... 3½d.	Obscured Sheet, 15 oz. ..... 3½d.
21 „ thirds ... 4½d.	„ „ 21 oz. ..... 4½d.
26 „ fourths ... 4½d.	Fluted, 15 oz. 7d., 21 oz. 9½d.
26 „ thirds ... 7½d.	Em'lled, 15 oz. 4½d., 21 oz. 6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

Per ft.	
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

"VITA" GLASS.

Per foot. s. d.	
Clear sheet—not exceeding 1 foot	1 0
Do. do. 2 feet	1 3
Do. over 2 feet	1 9
Polished plate—not exceeding 1 foot	1 6
Do. not exceeding 2 feet	3 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes	1 6
Horticultural—for greenhouses, etc. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1 0
3/16 in. Wired Georgian Design. Sizes up to 108 inches long by up to 24 inches wide.....	2 6

VARNISHES, &c.

Per Gallon. £ s. d.	
Oak Varnish ..... Outside	0 14 0
Fine ditto ..... ditto	0 16 0
Fine Copal ..... ditto	0 18 0
Pale Copal ..... ditto	1 0 0
Pale Opal Carriage ..... ditto	1 4 0
Best ditto ..... ditto	1 12 0
Floor Varnish ..... Inside	0 18 0
Fine Pale Paper ..... ditto	0 18 6
Fine Copal Cabinet ..... ditto	1 2 6
Fine Copal Flatting ..... ditto	1 0 0
Hard Drying Oak ..... ditto	0 18 0
Fine Hard Drying Oak ..... ditto	0 19 6
Fine Copal Varnish ..... ditto	1 0 0
Pale ditto ..... ditto	1 12 6
Best ditto ..... ditto	1 2 6
Best Japan Gold Size	0 12 0
Best Black Japan	0 10 0
Oak and Mahogany Stain (water)	0 12 0
Brunswick Black	0 7 0
Berlin Black	0 14 0
Knotting (patent)	1 5 0
French and Brush Polish	0 17 0
Liquid Dryers in Terebene	0 9 0
Cutrose Black Enamel	0 7 0

L.M.B. Sports Association.

We give below results and table in connection with the Football League of this Association up to and including Saturday, November 21 :—

RESULTS.

November 14.

Blue Circle	... 5	Downs	2

November 21.

Downs	2	Scafco	3
Trocoll	5	Blue Circle ...	0

TABLE.

	P.	W.	D.	L.	Goals. F.	A.	Pts.
Trocoll ...	6	5	—	1	21	8	10
Holloway ...	3	3	—	—	8	2	6
Higgs ...	4	3	—	1	14	4	6
Scafco ...	5	2	—	3	8	12	4
Blue Circle..	6	2	—	4	12	17	4
Downs ...	6	—	—	6	5	25	0

THE SCOTTISH BUILDER

NEW BUILDINGS

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Tuesday evening.*

Dundee.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer: North-Lindsay-street—warehouse and offices for Messrs. John Menzies and Co., Ltd., Messrs. Gordon and Scrymgeour, architects, 7, Ward-road, Clepington-road—additions for Mr. W. Black, Mr. W. M. Patrick, architect, 26, Yeaman-shore.

Edinburgh.—HOUSES.—The T.C. are inviting tenders for 106 houses and two shops on the Niddrie Mains housing scheme. Mr. E. J. MacRae, A.R.I.B.A., is the City Architect.

Economic Conditions Abroad.

We have received from the Department of Overseas Trade copies of reports on "Economic Conditions in Finland" and "Economic Conditions in Egypt." The former is published at 2s. 2d. and the latter at 4s. 3d. post free, and both are obtainable from H.M. Stationery Offices, at Adastral House, Kingsway, W.C.2; York-street, Manchester; 1, St. Andrew's-crescent, Cardiff; and 120, George-street, Edinburgh.

HOUSING PROGRESS IN SCOTLAND.

THE following figures show the progress that has been made in State-aided housing schemes in Scotland to October 31, 1931 :—

	Completed.	Under construction.
1919 Act	25,129	—
Do. (by public utility societies)	421	—
Private subsidy schemes (1919 Additional Powers Act)	2,324	—
Slum clearance schemes ...	14,001	1,442
1923 Act :—		
By local authorities ...	4,033	—
By private enterprise ...	20,454	2,260
By public utility societies	80	—
1924 Act :—		
By local authorities ...	53,104	6,412
By private enterprise ...	5,135	573
By public utility societies	127	16
1930 Act :—		
By local authorities ...	126	3,180
Unallocated houses ...	—	70
Demonstration houses ...	17	—
Steel houses erected on behalf of Government by Scottish National Housing Company	2,552	—
	125,503	13,953

BUILDING TRADE WAGES IN SCOTLAND*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons'† Bricklayers'† Plasterers'.†
Aberdeen	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Airdrie	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Alexandria	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Arbroath	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Ayrshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Bathgate	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2 1/3
Berwickshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Bo'ness	1/7	1/7	1/7	1/8	1/7	1/7	1/7	†1/2½
Broughty Ferry	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Clackmannanshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Coatbridge	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Dumbartonshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Dumfries	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Dumfriesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Dundee	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Dunfermline	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Duncon	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
East Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Edinburgh	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Falkirk	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Forfarshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Fort William	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/2
Galashiels	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Glasgow	1/7	1/7	1/7	1/8½	1/7	1/7	1/7	1/2½
Greenock	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	‡1/2½ †1/2½
Hawick	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Helensburgh	1/7	1/7	1/7	1/8½	1/7	1/7	1/7	‡1/2½ †1/2½
Inverness	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	10d.–1/2
Inverurie	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7	1/2
Kilmarnock	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kincardineshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Kinross-shire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kirkcaldy	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Kirkwall	1/5	1/5	1/5	1/6	1/5	1/5	1/7	1/–
Lanarkshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Leith	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Midlothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	‡1/2½ †1/2
Peeblesshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Perth	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Perthshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
Peterhead	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/7	1/2
Renfrewshire	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Rothesay	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Roxburghshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1½
St. Andrews	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Selkirkshire	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
Stirling	1/7	1/7	1/7	1/8	1/7	1/7	1/7	‡1/2½ †1/2½
Stirlingshire, West	1/6	1/6	1/6	1/6	1/6	1/6	1/7	1/1
Stornoway	1/6	1/6	1/6	1/7	1/6	1/6	1/7	1/1
West Lothian	1/7	1/7	1/7	1/8	1/7	1/7	1/7	1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½ †1/2½

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 892.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	9	9
Add if in clay	,, ,,	1	0
Add for every additional depth of 6 ft.	,, ,,	0	6
Planking and strutting to trenches	per foot super	0	4
Do. to sides of excavation, including shoring	,,	0	0

CONCRETOR.

Port. and cement concrete in foundation 1 to 6	per yard cube	27	0
Add if in underpinning in short lengths	,, ,,	6	0
Add if in floors 6 in. thick	,, ,,	2	6
Add if in beams	,, ,,	3	0
Add if aggregate 1 : 2 : 4	,, ,,	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	,,	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	,,	7	10	0
Add if in Staffordshire blues	,,	22	0	0
Add if in Portland cement and sand	,,	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	,, ,,	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork:—

Fair external in half brick rings	,, ,,	0	0	10
Axed in stocks	,, ,,	0	1	9
Rubbed and gauged jointed in putty camber or segmental	,, ,,	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	,, ,,	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks		4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	,, ,,	9	6
Three-quarter-inch on flats in two thicknesses	,, ,,	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	,,	1	0

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	,, ,,	22	0
Bath stone and all labour fixed	,, ,,	10	6
Beer stone and all labour fixed	,, ,,	15	0
Portland stone fixed	,, ,,	20	0
Chilmark stone fixed complete	,, ,,	17	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	,,	80	9
Do. 24 in. × 12 in. Do. Do.	,,	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube					4 3
Do. joists	,, ,,					4 9
Do. roofs, floors and partitions	,, ,,					5 3
Do. trusses	,,					7 9
Deal rough close boarding	per sq.	¾" 33/6	1" 38/-	1¼" 43/-	2" 70/-	
Flat centering for concrete floor, including struts or hangers	,,					50 0
Do. to beams	per ft. sup.					0 9
Centre for arches	,,					1 6
Gutter boards and bearers	,,					1 0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	42/6	50/-	57/6
Do. tongued and grooved	,,	—	47/-	56/-	64/-
Do. matchings	,,	44/-	49/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	,, ,,	2	1
Add for fitting and fixing	,, ,,	0	3
Deal-cased frames with 1 in. inner and outer linings, 1¼ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	,,	3	9

DOORS

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/3	2/5
Four-panel Do.	,,	2/4	2/6	2/9
Two-panel moulded both sides	,,	2/6	2/9	2/11
Four-panel Do. Do.	,,	2/9	2/11	3/2

CARPENTER AND JOINER—continued

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	,,	1/4	1/6	1/9
Add if cross-tongued		2d.	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail average, 3 in. × 3 in.	,, ,,	6	0
Add if ramped	,, ,,	12	0
Add if wreathed	,, ,,	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	3
Plain compound girders	,,	18	0
Do. stanchions	,,	20	9
In roofwork		26	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/4	1/7	1/9	2/-
Ogee Do. Do.	,,	1/6	1/9	2/3	2/9
Rain-water pipes with ears	,,	1/6	2/4	—	—
Extra for shoes and bends	each	3/4	4/11	—	—
Do. stopped ends	,,	1/6	1/10	2/9	3/3
Do. nozzles for inlets	,,	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	40	0
Do. Do. in flats	,,	39	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	,, ,,	1	3
Copper nailing	,, ,,	0	3

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/1	1/7	1/10	3/-	3/6	—
Do. service	,,	1/6	2/-	2/5	3/6	—	—
Do. soil	,,	—	—	—	—	—	6/-
Bends in lead pipe	each	—	—	—	—	3/-	6/6
Soldered stop ends	,,	1/-	1/4	1/9	2/6	3/2	—
Red lead joints	,,	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	,,	2/6	3/-	3/6	4/4	5/6	7/9
Lead traps and cleaning screws	,,	—	—	—	12/7	17/6	—
Bib cocks and joints	,,	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	,,	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	3
Do. Do. Sirapite	,, ,,	2	6
Do. Do. Keen's	,, ,,	3	6
Add saw lathing	,, ,,	1	7
Add metal lathing	,, ,,	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	,, ,,	2	2
Do. plain face	,, ,,	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	3

GLAZIER.

21-oz. sheet plain	per foot sup.	0	7½
26-oz. Do.	,, ,,	0	10
Obscured sheet	,, ,,	1	1
¼-in. rolled plate	,, ,,	0	9
¼-in. rough rolled or cast plate	,, ,,	0	10
¾-in. wired cast plate	,, ,,	1	3

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	,, ,,	0	7
Plain painting, 1 coat	,, ,,	0	9
Do. 2 coats	,, ,,	1	2
Do. 3 coats	,, ,,	1	9
Do. 4 coats	,, ,,	2	4
Graining	,, ,,	2	3
Varnishing twice	,, ,,	1	9
Sizing	,, ,,	0	3
Flatting	,, ,,	0	7
Enamel	,, ,,	1	1
Wax polishing	per foot sup.	0	6
French polishing	,, ,,	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of £ ½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Abergavenny.—Covering of the reservoir, for the T.C. Mr. J. C. Hughes, engineer, London:—
*Rees Edwards, Tredegar £8,961

Annbank.—Housing scheme, for the Ayrshire C.C. Mr. William Reid, architect, County Offices, Wellington-square, Ayr:—
Digger, brick and mason works — *T. McWhirter, Hebron, Ayr-road, Prestwick.
Joinery, carpentry and ironmongery works—*J. Boyd, 30, Townhead-street, Cumnock.
Painter work, etc.—*A. E. McMillan, Ochiltree.
Fencing and gates — *J. Nairn & Co., Ltd., Townhead Ironworks, Kilwinning.
Plumber work—*T. Alston, 198, Low Waterroad, Hamilton.
Plaster work, etc.—*Tait Bros., South-street, Dalry.
Slater work, etc.—*J. Kelly & Sons, 9, Portland-street, Troon.
Electric installations—*R. Yuille & Sons, 71, Portland, Kilmarnock.
Glazing works—*A. S. Wright & Co., 232, High-Street, Ayr.

Barnstaple.—Four houses at Cobbaton, Swimbridge, and two at Guineaford, and two at Prixford, Marwood, for the R.D.C. Mr. Harold Hargreaves, Building Surveyor, Red House, Castle-street:—
Two houses, Guineaford, Marwood—*Wm. Isaac & Sons, Braunton.
Two houses, Presford, Marwood—*R. Atkine, Braunton.
Four houses, Cobbaton, Swimbridge—*P. Govier, South Molton.

Beaconsfield.—First portion of scheme for shops. Messrs. J. Stanley Beard & Clare, architects and surveyors, National Bank House, 101-3, Baker-street, W.1:—
*Y. J. Lovell & Son, Gerrards Cross.

Bedlington.—Dance hall and skating rink at Bedlington Station, for Mr. J. G. Hall, Sleekburn:—
Framework—*Glasgow Iron Roofing Co., Newcastle.

Belfast.—Alterations to Raleigh House, Queen-street, for the Corporation. Messrs. W. H. Stephens & Sons, chartered surveyors, 13, Donegall-square North:—
‡John Elliott, Hillsboro'-street, Belfast.

Bellshill.—Additions to and extensions of the County Maternity Hospital, for the Lanarkshire C.C. Mr. Peter Smith, architect, County Architect's Office, Hamilton:—
Digger, brick and mason works—
*L. B. White, Mossend, Bellshill... £1,373 0 0
Joinery, ironmongery and carpentry—
*Geo. Wilson (Stonehouse), Ltd., Kirk-street, Stonehouse 3,017 19 11
Plumber work—
*Hugh Twaddel & Sons, London-road, Glasgow ..... 1,2?0 0 0
Slater and roughcast works—
*Wilson & Hendry, 36, Portland-street, Hamilton 532 5 4
Heating engineering work—
*A. Anderson, 24, Windsor-street, Scotstoun, Glasgow 1,000 14 10
Painter work etc.—
*T. Hastie & Sons, Tullis-street, Bridgeton, Glasgow 420 5 5½
Electrical installation—
*Grindley Ross, Reid-street, Bridgeton, Glasgow 361 16 0

Bentley.—96 small type houses off Arksey-lane, for the U.D.C. Mr. P. C. Woodall, surveyor:—
Per block.
*F. Haslam, Ltd., Doncaster £1,317

Billingham.—Central hall adjoining The Green, for the Trustees of Methodist Church. Mr. T. W. T. Richardson, F.R.I.B.A., architect, 57, High-street, Stockton-on-Tees:—
*A. Elcoat, New Brancepeth.
(Estimated cost, £15,000.)

Birmingham.—Shop premises with living accommodation in Gospel-lane and Lakey-lane, Acocks Green, for Messrs. Jack Cotton, 35, Waterloo-street. Messrs. Skelcher & Machin, Architects, 156, Edmund-street:—
*P. H. Perks, Hazelwood-road, Acocks Green, Birmingham.

Blackburn.—New Church of St. Gabriel's off Roelee-park, Brownhill housing estate, for Rev. A. Smith and Churchwardens. Messrs. F. X. Velarde & B. A. Miller, AA.R.I.B.A., architects, 3, Abercromby-square, Liverpool:—
*W. Livesey & Sons, Blackburn.
(Estimated cost, £16,000.)

Blackpool.—Buildings in George-street and Coleridge-road, for Messrs. Waller & Hartley (1927), Ltd. Mr. Halstead Best, F.R.I.B.A., architect, Clifton-street:—
*Sir Lindsay Parkinson & Co., Ltd., Blackpool.

Blaydon-on-Tyne.—Alterations and improvements to the "Forresters Arms." Messrs. T. A. Page & Son, architects, 67, King-street, South Shields:—
*Ward & Gibson, Blaydon.

Bristol.—Parcels depot at Market-road, Temple Meads, for the G.W.R. Chief Engineer, Paddington Station:—
*C. A. Hayes & Sons, St. Thomas-street, Bristol.

Bristol.—For the Southmead housing scheme, for the T.C.:—
‡E. A. Poole & Sons, Bristol.
‡Wilson Lovatt, Ltd., Wolverhampton.

Canterbury.—Private residence in Whitstable-road:—
*McConnell & Co., Station-road East, Canterbury.

Cardiff.—Conversion of the old carriage shed at De Croche-place, Canton, into milk and fruit depot, for the G.W.R. Chief Engineer, Paddington Station:—
*E. Turner & Son, Ltd., Penarth-road, Cardiff.

Chesterfield.—Rebuilding "Lord Nelson" Inn, Stephenson-place, for Messrs. William Stokes, Ltd., Cannon Brewery, Sheffield. Mr. J. R. Wigfull, F.R.I.B.A., architect, 14, Parade-chambers, Sheffield:—
*A. Bradbury, Sheffield.

Clare.—Housing, for the R.D.C. Mr. H. B. Thake, architect:—
Hundon (2)—
*H. Debenham, Glemsford £755 10
Poslingford Shadow Bush (2)—
*H. Debenham, Glemsford 729 16
Poslingford village (2)—
*H. Debenham, Glemsford 741 12
Stansfield village (2)—
*H. Debenham, Glemsford 741 0
Withersfield (4)—
*H. Debenham, Glemsford 1,446 0

Croydon.—Sub-station in the Glade, Monks Orchard, for the C.B.:—
Grace & Marsh, Ltd. £237
F. Liley 235
E. J. Saunders 227
E. H. Smith, Ltd. 221
Truett & Steel 215
*D. Waller 209

Henderson"
SLIDING
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GEAR
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"TANGENT-LOCK-UP" DOOR GEAR
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Croydon.—Sub-station at Kynaston-road, for the C.B.:—
F. Liley £220 0
Grace & Marsh, Ltd. 210 0
E. H. Smith, Ltd. 206 0
Truett & Steel 199 0
E. J. Saunders 197 0
*G. Poulton & Sons 190 10

Croydon.—Women's recreation room at Cheam Sanatorium, for the C.B.:—
*J. W. Wright (Builders), Ltd., South Norwood £675

Dalmellington.—20 houses, for the Ayrshire C.C. Mr. William Reid, architect, County Offices, Wellington-square
Digger, brick and mason works — *T. McWhirter, Hebron, Ayr-road, Prestwick.
Joinery, carpentry and ironmongery works—*J. Wilson, Westview, Tarbolton.
Painter work, etc.—*A. E. McMillan, Ochiltree.
Fencing and gates—*J. Nairn, Ltd., Townhead Iron Works, Kilwinning.
Plumber work, etc.—*J. R. Smith, 37, Peebles-street, Ayr.
Plaster work, etc.—*W. Shaw, 100, High-street, Irvine.
Slater work—*J. Kelly & Sons, 9, Portland-street, Troon.
Glazier work—*J. Thorn, 33, George-street, Ayr.
Lathing work—*J. & W. Fullerton, New-road, Ayr.

Daventry.—Alterations to the Staverton Isolation Hospital, for the R.D.C. Mr. J. B. Williams, engineer and surveyor:—
*Atkins Bros., Daventry.

Durham.—Installation of heating system in (*a*) Bolden Colliery Council school,, and (*b*) in Coundon Council school, for the E.C. Mr. F. Willey, F.R.I.B.A., County Architect, 34, Old Elvet:—
(*a*) *Steel & Co., Ltd., Sunderland ... £1,515
(*b*) *Brightside Foundry & Engineering Co., Ltd., Sheffield 1,105

Easington.—Extending the day-room and dormitory at the Men's Hospital, and erecting a urinal in connection with the Poor Law Institution, for the Durham C.C.—Mr. Wm. J. Merrett, County Surveyor, 43, Old Elvet, Durham:—
*Harland & Parker, West Hartlepool.

East Grinstead.—Structural alterations and extensions to showrooms, offices and workshops, for the East Grinstead Gas & Water Co. Mr. P. H. Raw, architect, 71, London-road, East Grinstead:—
*Ringmer Building Works.

Edinburgh.—Demolition and reconstruction of Brown's-close, Canongate, for the T.C. Mr. E. J. MacRae, A.R.I.B.A., City Architect. Quantities by Messrs. R. and A. K. Smith, 4, Ferres-street, Edinburgh:—
Mason—
*G. & R. Cousin, 24, Hill-street, Edinburgh £2,242 0 0
Joiner—
*Ritchie & Anderson, Motherwell 778 10 4
Plumber—
*P. Knox & Son, 31, Crighton-place, Edinburgh 347 6 10
Plasterer—
*Alexander Gorrie, Cowdenbeath . 262 13 1
Slater—
*P. Kelly & Son, 129, Montgomery-street, Edinburgh 118 0 0
Painter—
*W. F. Russell, 12, Queen-street, Edinburgh 69 0 0

Edinburgh.—16 houses at Craigentinny-avenue, Portobello-road:—
*James Miller & Co., Edinburgh.

Finedon.—Alterations to central premises in Church-street, for the Finedon Industrial Co-operative Society, Ltd. Mr. A. Allen, architect, Irthlingboro, near Wellingborough:—
*Childs & Co., Finedon.

Glasgow.—Extension to the chocolate manufactory of Messrs. R. S. McColl, Ltd., at North Woodside-road, Cowcaddens. Messrs. R. S. McColl's Master of Works, architect, North Woodside-road:—
Digger, brick and mason works—*J. Green & Co., Ltd., 219, St. Vincent-street, Glasgow.
Steel contruction work—*T. & R. Fleming, 129, Trongate, Glasgow.
Joinery, and ironmongery works, etc.—*J. & C. Fleming, 24, Waterside, Strathaven.
Plumber work, etc.—*J. Sommerville, 27, Helen-street, Govan.
Plaster work, etc.—*W. Walker & Sons, Eglinton-street, Glasgow.
Painter work, etc.—*T. Hastie & Sons, 2, Tullis street, Glasgow.

Glasgow.—New buildings and reconstructions, etc., at Temple Saw Mills, Anniesland, for the Partick Saw Millers, Partick, Glasgow. Messrs. John Laird & Son, architects, 11, Bothwell-street:—
Joinery, ironmongery and carpentry works, etc.—*M. Simpson & Co., 62, Princes-street, Govan, Glasgow.
Plumber work—*S. Renfrew, 158, North-street, Glasgow.
Slater work, etc.—*A. C. White & Co., Ltd., London-road, Carmyle.
Painter work—*McCulloch & Co., Ltd., West Regent-street, Glasgow.

Glasgow.—New factory, for Messrs. John Wallace (Sausages), Ltd., Jamaica-street. Mr. William McWhannel, F.R.I.B.A., architect., 233, West Regent-street, Glasgow :—

Digger, mason and brick works, etc.—*T. & W. Anderson, 64, Douglas-street, Glasgow.
Joinery, carpentry and ironmongery works—*James Milne & Sons, 900, Springfield-road, Glasgow.
Steelwork—*L. & W. McLellan, 129, Trongate, Glasgow.
Asphalt work—*Limmer & Trinidad Co., Ltd., 45, Hope-street, Glasgow.
Plumber work—*W. Anderson, 133, Wellington-street, Glasgow.

Glasgow.—Improvements to the Robroyston Hospital at Robroyston Millerston, Bishopbriggs :—*John Livingston, 108, West Regent-street, Glasgow.

Glasgow.—Four villa houses at Helensburgh-drive, Jordonhill, Partick. Messrs. Clark, Bell & J. H. Craigie, architects, 227, Bath-street, Glasgow :—
*William Shaw & Son, Ltd., 94, Commerce-street, Glasgow.

Glasgow.—Extension to Messrs. J. Craigs, Ltd., premises in Gordon-street. Mr. James Carruthers, architect, 209, St. Vincent-street :—
Painting work—
*Sellers & Sons, 241, West George-street, Glasgow.
Monel metal fittings—
*Burnside & Co., 1041, Argyle-street, Glasgow.

Kintore.—Two blocks of houses, for the T.C. :—
Mason—
*D. Main & Son, Aberdeen.
Carpenter—
*Marcus Goodall, Aberdeen
Slater—
*C. MacDonald & Sons, Dyce
Plasterer—
*Paul McPherson, Inverurie.
Plumber—
*R. Joss, Inverurie.
Painter—
*Stewart Halliday, Oldmeldrum
Electric work—
*T. C. Smith & Co., Aberdeen.

Knockentiber.—46 houses, for the Ayrshire C.C. Mr. William Reid, architect, County Offices, Wellington-square, Ayr :—
Digger, brick and mason works—*W. McClure, 5, Ayr-street, Irvine.
Joinery, carpentry and ironmongery works, etc.—*A. M. Inglis, 34, Grange-street, Kilmarnock.
Painter work, etc.—*D. McAuslin & Son, New-street, Stevenson.
Fencing and gates—*J. Nairn, Ltd., Townhead Ironworks, Kilwinning.
Plumber work—*T. Wyllis & Sons, 13, Waterloo-street, Kilmarnock.
Plaster work — *W. Shaw, 160, High-street, Irvine.
Slater work, etc.—*J. MacPherson, Roughcaster, Stewarton.
Electric installation.—*D. C. Adamson, Prestwick.
Glazing work—*J. Thorn, 33, George-street, Ayr.

Liverpool.—Church on the corner of Pinehurst-avenue and Pinehurst-road, for Rev. J. Howard Foy and Church Wardens. Mr. Bernard A. Miller, A.R.I.B.A., architect, 3, Abercromby-square :—
*G. Platt & Sons, Ltd., Liverpool.

¶London.—Tenders accepted by H.M.O.W. for the week ending November 21 :—
Manchester Post Office, Dickinson-street—conversion—Tinker & Young, Ltd., Mousall-street, Manchester.
General Post Office, West—external and internal painting—A. Bagnall & Sons, Ltd., 7, Market-street, Shipley.
Old-street Branch Post Office—alterations—J. Jennings & Son, Ltd., 42-44, Leman-street, Aldgate, E.1.
Ashford S.S.O.—erection of garage—Hammond & Co. (Canterbury), Ltd., 1-3, St. Peter's-lane, Canterbury.
N.P.G. Duveen Extension—marble work—J. Whitehead & Sons, Ltd., 64, Kennington Oval, S.E.11.
South Audley-street B.P.O.—alterations—A. Davies (Shopfitters), Ltd., Horn-lane, W.3.
Larkwood T.E.—erection—Stanley & Sons, 49, Fillebrook-road, Leytonstone, E.11.
Wembley S.O.—extension—J. B. Sharman, Ltd., West Cliff-road, Ramsgate.
Wokingham P.O. and T.E.—erection of second portion—W. A. James & Sons, Station Works, Maidenhead.

¶London.—Sanitary annexes at Woolwich :—
*G. E. Wallis & Sons, Ltd., Gravesend.

London.—Materials for the St. John's College housing estate, for the Battersea B.C. :—
First block of tenements—
Roofing tiles—
*Eastwood, Ltd., 47, Belvedere-road, S.E. £194 8 2
Second block of tenements—
Patent hollow sound and fire resisting flooring—
*Kleine Co., Ltd., New Oxford House, Hart-street, W.C.1 ..... £2,487
Red facing, etc., bricks—
*Ibstock Collieries, Ltd., Ibstock, near Leicester.

London.—Sixth block of working-class dwellings, comprising 18 tenements, on the Wolcot-street area of Somers Town, for the St. Pancras B.C. :—

S. E. Moss & Sons, Chelmsford	£10,600	0
Eastern Construction Co.	9,860	0
R. B. Wade	9,530	0
Proprietary Buildings, Ltd.	9,505	2
E. A. Thorn & Son, Sutton	9,289	0
J. Gutheridge & Sons, Ltd., Peterborough	9,171	0
Buckingham & Sons	9,154	0
Patman & Fotheringham, Ltd.	9,077	0
J. Parnell & Sons, Rugby	9,077	0
Thos. Cole (Barnsbury), Ltd.	9,063	0
Pitts, Ltd.	9,017	0
W. H. Wagstaff & Sons	9,007	0
William Downs, Ltd.	8,829	0
Holliday & Greenwood, Ltd.	8,825	0
G. E. Wallis & Sons, Ltd.	8,730	0
J. & R. Thompson (London), Ltd.	8,726	0
Thomas & Edge, Ltd.	8,691	0
Leslie & Co., Ltd.	8,679	0
L. & W. Whitehead, Ltd.	8,630	0
R. Dixon & Son	8,534	0
F. & H. F. Higgs, Ltd.	8,530	0
J. A. Perrin & Co.	8,438	7
G. F. Waterman & Co., Watford	8,423	0
R. J. Rowley, Ltd.	8,417	0
A. T. Rowley	8,409	0
A. E. Symes, Ltd.	8,377	0
Albert Monk, Edmonton	8,330	0
Chessums, Ltd.	8,270	4
W. H. Gaze & Sons, Ltd., 23, High-street, Kingston-on-Thames	8,244	10
Hill & Gurr, Bromley	8,190	0
Grosvenor Construction Co., Ltd.	8,164	10
R. J. Truscott	8,112	0
Rowley Bros. (1929)., Ltd.	8,100	10
J. E. Billings & Co., Ltd.	7,998	0
S. Shaw, Ltd.	7,973	10
R. Mansell	7,863	0
‡John Greenwood, Ltd., 12-14, Arthur-street, E.C.4	7,785	0

(Remainder of London.)

London.—For (*a*) extension of Hoxton public baths, and (*b*) erection of women's hospital, for the Shoreditch B.C. :—

(*a*) *Supply and fix in situ terrazzo flooring, wall lining and partitions, and bronze metal door posts*—
*Diespeker & Co., Ltd., 57/60, Holborn-viaduct, E.C.1. ..... £607 14 4
(*b*) *Supply and erect steelwork, and form floors*—
*Frazzi, Ltd., Norfolk-street, W.C. 1,840 0 0

London.—50 flats in Garratt-lane, S.W., for the Wandsworth B.C. :—

W. J. Marston & Son	£35,568
Streek & Co., Ltd.	35,097
H. Hann	34,938
J. E. Billings & Co., Ltd.	34,726
A. Roberts & Co., Ltd.	34,363
J. Guttridge & Sons, Ltd., Peterboro'	34,350
L. & W. Whitehead, Ltd.	34,295
H. Bacon & Sons, Ltd., Coulsdon	34,250
Thomas & Edge, Ltd.	33,975
J. & C. Bowyer, Ltd.	33,934
W. F. Goodchild	33,387
R. Barwick, Dover	33,375
J. W. Saunders, Beckenham	33,290
C. H. Gibson, Ltd.	33,250
Carolite Construction Co., Ltd.	33,088
C. Miskin & Sons, Ltd., St. Albans	33,020
H. H. & F. Roll, Ltd., Epsom	33,011
R. J. Rowley, Ltd.	32,983
Humphreys, Ltd.	32,811
W. J. Simms, Sons & Cooke, Ltd., Nottingham	32,650
Hill & Gurr, Bromley	32,560
E. Cotton, Ltd., Iver	32,500
Unit Construction Co., Ltd.	32,439
A. T. Rowley	32,834
Alan V. Goad	32,330
Perry's (Ealing), Ltd.	32,222
John Greenwood, Ltd.	32,096
Cropley Bros., Ltd., Epsom	31,919
E. Cowper	31,550
R. Mansell	31,479
Rowley Bros. (1929), Ltd.	31,444
Grosvenor Construction Co., Ltd.	30,990
Buckingham & Sons	30,814
Hammond & Barr, Ltd.	30,776
‡E. Clarke & Sons, Melton Mowbray	30,400

(Remainder of London.)

London.—Wiring and fittings for electric lighting and heating, wiring for electric motors and provision of telephones at the Northern outfall works, for the L.C.C. :—

The Berkeley Electrical Engineering Co., Ltd.	figures	£8,383
Ditto	words	8,833
H. J. Cash & Co., Ltd.		7,369
Buchanan & Curwen		6,999
T. Clarke & Co., Ltd.		6,696
Hall & Stinson, Ltd.		6,319
Pinching & Walton		6,160
Electrical Installations, Ltd.		5,882
Barlow Brothers & Co.		5,493
*Harland & Wolff, Ltd., North Woolwich, E.16		4,739

(All of London.)
(Chief Engineer's estimate: £6,380.)

Manchester.—Reconstruction of premises in Oldham-street, Piccadilly, for Messrs. R. H. O. Hills, of Blackpool. Messrs. Lomas & Barrett, architects, 67, Albert-street, Colne :—
Brickwork, concrete and joinery—*Chadwick Bros., Blackpool.

Manchester.—Extensions at the Manchester Opera House, for Messrs. Howard & Wyndham, Ltd. Mr. John Cameron, architect, 55, View-path, Edinburgh :—
Mason and joiner—*Frank Butterworth, Ltd.
Plumber—*A. Longworth & Sons.
Plasterer—*James Ferguson & Son, Ltd.
Electricity—*Strand Electric Co., London.
Heating—*Saunders & Taylor, Ltd.
Vacuum plant—*Sturtevant Engineering Co.
Asphalt.—*Limmer & Trinidad Lake Asphalt Co., Ltd.
Painters and decorators—*Waring and Gillow, Ltd.
(Rest of Manchester.)

Manchester.—Alterations to premises at 93, Oldham-street, for Messrs. Price Tailors (1928), Ltd., of Leeds :—
Builders—*W. Mason & Son, Bradford.
Electricians—*Baker & Higham, Leeds.
Plasterer—*A. E. James, Hulme.
Decorator—*C. Blake & Co., Manchester.

Manchester.—Conversion of 2 houses into 2 shops and houses at 2, Moreton-avenue, Cheetham Hill-road. Messrs. Broughton, Atkinson, Eagle & Sons, architects, 37, Brown-street :—
*H. Lapidus, Manchester.

Nantwich.—New waterworks at Bearstone, for the R.D.C. :—
Cast-iron pipes—
*Stanton Iron Co. £42,537
Laying pipes, construction of reservoir—
*A. Monk, Warrington 26,751
Laying pipes in Audlen district—
*W. Mulcaster, Crewe 8,537
Wrenbury district—
*W. Mulcaster, Crewe 8,237

Newcastle-on-Tyne.—Garage premises in Sandyford-road, for Messrs. T. Howe, of Helmsley-road :—
*S. Fenwick & Co., 46, Dunn-street, Newcastle.

Newcastle-on-Tyne.—Restoration work in connection with St. Nicholas' Cathedral :—
*J. Lowrey, Corporation-street.

Newcastle-on-Tyne.—7 houses for the City Council. Mr. R. E. Roberts, housing architect :—
*Nordmann & Sons, Ltd., Dunston-on-Tyne £2,450

Newcastle-on-Tyne.—Rebuilding of the Marlborough Hotel. Messrs. J. Oswald & Sons, architects, 2, Worsick-street :—
*J. Simpson & Co., Northumberland-road.

Newport.—Internal and external painting to certain houses on the St. St. Julian's and Somerton estates, for the Corporation. Mr. O. T. Morgan, Town Clerk :—
*J. W. Henson, 11, Victoria-avenue, Newport £1,060

North Riding.—Erection and completion of the Leyburn Poor Law Institution. Mr. J. R. White, F.R.I.B.A., County Architect, County Hall, Northallerton :—
*Moody Bros., Northallerton.

North Shields.—Foundations for the new coaling staithes to be erected near Northumberland Dock by the River Tyne Commission :—
*Brims & Co., Pandon-buildings, City-road, Newcastle.

Plymouth.—30 houses and 16 flats at Vicarage-road housing estate, St. Budeaux, Devonport, for the C.B. Mr. J. Wibberley, City Architect and Engineer, Sun-buildings :—
*Gordon Harris, 17, Morton-crescent, Exmouth.

Rankinston.—Twenty-two houses, for the Rankinston housing district scheme, for the Ayrshire C.C. Mr. William Reid, architect, County Offices, Wellington-square, Ayr :—
Digger, brick and mason works—*W. Govan & Sons, 73, Main-street, Prestwick.
Joinery, carpentry and ironmongery works—*R. S. Govan, 92, Main-street, Prestwick.
Electrical installation—*D. C. Adamson, Prestwick.
Fencing and gates—*Quintin McMillan, 6, Wagon-street, Ayr.
Plumber work, etc.—*R. & J. Jamie, 39, George-street, Ayr.
Plaster work, etc.—*W. Brown, Crosshill, Maybole.
Slater work, etc.—*D. Hogarth, 20, Fort-street, Ayr
Painting work, etc.—*A. E. McMillan, Ochiltree.
Glazing work—*J. Thorn, 33, George-street, Ayr.

Ripley (Derbys).—Five houses in Norwood-road, for the U.D.C. Mr. G. W. Bird, surveyor :—
*East & Walters £1,660

Rochdale.—Extensions to weaving sheds, for Messrs. E. Barnes & Sons. Mr. Sidney Stott, architect, 38, Yorkshire-street, Oldham :—
Builders—*R. & T. Howarth.
Steelwork—*Bannister, Walton & Co., Ltd., Manchester.
Cast-iron work—*Hindsford Foundry Co., Ltd., Atherton.
Carpenter and joiner—*Thos. Wilkinson (Rochdale), Ltd.
Plumber and glazing—*The Rochdale Plumbing Co., Ltd.
Slating—*E. Wild & Sons, Ltd., Ashton.
Painting—*A. & J. W. Lord.
(Rest of Rochdale.)

Sheffield.—Completion of St. Chad's Church, Norton, Woodseats, Sheffield, for Vicar, Rev. A. D. Clarke, St. Chad's Vicarage. Messrs. Hadfield & Cawkwell, F. & A.R.I.B.A., architects, 19, St. James-street:—

*O'Neill & Son, Sheffield.

Sheringham.—Rebuilding of the "Dunstable Arms," for Messrs. Steward & Patteson, Ltd., of Norwich. Messrs. Buckingham & Berry, F.S.I., F.R.I.B.A., architects and surveyors, 43a, Prince of Wales-road, Norwich:—

T. Gill & Son, Norwich	£3,987 0
R. W. Anderson, Sheringham	3,966 16
J. Youngs & Son, Ltd., Norwich	3,891 0
R. G. Carter, Drayton	3,871 0
*H. Bullen & Son, Ltd., Cromer	3,796 0

South Shields.—Pithead baths at Westoe for the Miners' Welfare Committee. Mr. J. H. Forshaw, architect to the committee, Dean Stanley-street, Westminster, S.W.1:—

*Henderson Brothers, Smith-street, South Shields.

Southport.—Building of the new Opera House in Lord-street on the site of the Opera House which was destroyed by fire:—

*William Tonkinson & Son, Liverpool £70,000

Sunderland.—New bridge over the Hendon Junction gateway at the South Dock, for the River Wear Commissioners:—

*Cleveland Bridge & Engineering Co., Ltd., Darlington.

Sunderland.—Alterations to the plunge baths in High West-street, for the T.C Borough Engineer:—

*Joseph Carter, Deptford-terrace, Sunderland.

Swindon.—Goods shed, warehouse, offices, and other works at Swindon Station, for the G.W.R. Chief Engineer, Paddington Station:—

*H. & C. Spackman, Hunt-street, Swindon.

Thorne.—100 parlour and non-parlour type houses on housing estate at Thorne Moor Ends, for the R.D.C. Mr. H. Plews, surveyor:—

Parlour type—
*Whittington, Ltd., Doncaster £263 10

Non-parlour type—
*Whittington, Ltd., Doncaster 245 9

Wakefield.—88 A3 houses on the Earnley estate, Alverthorpe-road, for the T.C. Mr. P. Morris, L.R.I.B.A., City Architect:—

*G. Crook & Sons, Ltd., Wakefield.

Washington Station.—Papering and painting (inside and outside) of Washington Station Club and Institute. Mr. G. Short, secretary, 9, Eden-terrace:—

*R. A. Benson, 6, Ogle-terrace, South Shields.

Whitwood.—New shopping parade, Methley-road. Messrs. Blenkinsopp & Scatchard, A. & L.R.I.B.A., chartered architects, Midland Bank-chambers, Bank-street, Castleford:—

Excavator and bricklayer—*J. L. Rodgers & Sons, Ltd.
Carpenter and joiner—*G. E. Greaves & Sons.
Plumber and glazier—*Geo. King.
Plasterer—*G. F. Bateson.
(All of Castleford.)
Stonework—*Girlings' Ferro-Concrete Co., Ltd., Rothwell, near Leeds.

Winlaton (Durham).—Improvements to the "Vulcan Inn." Messrs. T. A. Page & Son, architects, 67, King-street, South Shields:—

*Ward & Gibson, Blaydon-on-Tyne.

Wyken.—Junior school, for the Warwickshire E.C. Mr. A. C. Bunch, F.R.I.B.A., County Architect, 27, Binswood-avenue, Leamington Spa:—

*Bosworth & Wakeford, Ltd. £12,151

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